

STRUCTURE AND FUNCTION IN ARABIC

by

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DEDICATION

I dedicate this work to my dear parents, who have fought
for my upbringing and education;

To my family, who have been deprived of my attention; and

To Elizabeth, who has been of tremendous support and inspiration.

ABSTRACT

This thesis discusses the structure and function of the clause in Modern Written Arabic (MWA).

Description of Arabic syntax ranges from the traditional Arabic accounts through the descriptive accounts of 19th century European Arabists (Brocklemann, Wright) to transformational accounts (Snow, Killeen, Lewkowicz). This study adopts a 'lexicalist' approach, thus, while taking the facts of traditional grammar as 'given' and transformations as one component of the grammar, the former are reconsidered in the light of recent theory and the latter is simplified. For instance, the traditional treatment of 'particles' like ?inna is re-considered; the alleged structural ambiguity resulting from left-dislocating or focusing the subject is examined; and some other areas of controversy between the two traditional schools of Arabic grammar are discussed.

Within the lexicalist approach, with restrictions on permissible transformational operations and morphology being handled in the lexicon, there is a discussion of two processes of dislocation: left-dislocation which preposes elements to the left of the verb, and verb-attraction whereby constituents move from their places in a leftward direction to reach a position immediately to the right of the verb, always preserving the VSO order. Other structures like Topic-Comment and relative clauses are also discussed. It is hoped that this work will contribute towards narrowing, if not bridging, the gap between the traditional treatment of Arabic grammar and the recent developments in linguistic theory.

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Declaration

This thesis is my original work and of my
own execution and authorship.

Abdel-Majid I.M. Thalji

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Introduction

The study of Arabic grammar is of a long standing tradition and dates back as early as the 8th century A.D. At that time there was a soaring interest among Arab scholars in reviving the sciences, in an attempt to characterise those sciences belonging to the Arabs "'uluumu l-'arab", the sciences of the Arabs", as distinct from other foreign ones, of Greek or Indian origin. Arabic grammar and language constituted one of the major themes of exposition and analysis for at least two major reasons: (a) there was a growing 'fear' of 'corruption' that Arabic may encounter at the hands of the new non-Arab converts to Islam, (b) Arab scholars were deeply concerned with the investigation and analysis of the language as something of vital importance towards understanding and interpreting the Koran. It is not my intention to dwell on this historical issue, as it would take us far afield. Here, it suffices to say that grammatical and linguistic studies in general have been a recurrent theme since the 8th century, resulting in innumerable treatises, commentaries, and interpretations.

The grammar of Arabic captured the interest of European Arabists in the 19th century (Brockelmann, Caspari, Wright, etc.). Working within the framework of comparative linguistics and occupying themselves with correspondences, lexical and syntactic, between Semitic languages these linguists wrote descriptive accounts of Arabic grammar, by and large following the traditional Arab grammarians, and with the exception of some syntactic descriptions, their statements about the morphology and syntax of the various parts of speech did not add to the traditional accounts.

The appearance of the transformational model of grammar led linguists to reconsider those analyses. It was hoped that Arabic would attract some attention within this new model, but the amount of work on Arabic was of a limited nature. This could be attributed to two main reasons: first, the model was originally devised to handle the grammar of English and later other European languages, and attempts to apply the TG framework to Arabic - for instance, in the work of graduate students at the American University in Beirut - simply resulted in 'copies' of analyses originally developed for English. Secondly, there were not - and still are not - many TG linguists with a knowledge of Arabic, or indeed a thorough knowledge of any language other than English.

One of the current issues in syntactic studies within Trans-
formational theory has been the study of various grammatical processes and related pragmatic functions in the sentence. This work discusses various constructions in Arabic syntax associated with particular pragmatic functions. The descriptive framework incorporates two assumptions that should be mentioned beforehand. The first is that all morphology, both inflectional and derivational, is handled in the lexicon, in accordance with recent work by Lieber (1981) and Aronoff (1976). This assumption is relevant to the treatment of the Topic-Comment construction in Chapter IV.

The second assumption is that the syntactic categories required for the description are Noun, Verb and Adjective. Noun and Verb are distinct distributional classes in Arabic and have always been recognised by traditional Arabic grammar, but the Adjective has not been recognised as a separate category, presumably because it shares a number of morphological characteristics with the Noun. However, the Adjective does have a different distribution from the noun and has its own morphological characteristic in that adjectives, but not nouns, can be formed from intransitive verbs denoting states or qualities.

Participles are treated here as a sub-type of adjective. It is assumed, following Jackendoff (1977), that different parts of speech have different sets of features. A detailed discussion of the features appropriate for Arabic is not relevant to the discussion in Chapters II - IV, but it must be mentioned here that participles are assigned the features [+ A] and [+ object], whereas other adjectives are [+ A] and [-object]. The feature [+ object] will be of great importance in the statement of the Modifier Movement Constraint in Chapter II.

The general framework of the discussion is Chomsky's Extended Standard Theory - cf. Chomsky (1970). A list of the necessary PS rules and transformations is given in the appendix.

The Language:

The language under discussion is Modern Written Arabic (henceforth MWA), which is widely used as a lingua franca among the Arab nations to preserve unity in the Islamic faith and pan-Arab interests. MWA is the direct descendent of Classical Arabic - the revered language of the Holy Book, 'The Koran', and the language of Medieval classics of Arabic literature. It is used nowadays for practically every written document in the Arabic speaking world. Newspapers, books, magazines and articles are written in this literary language. However, it is worth noting that MWA is the native tongue of no Arab, though it is sometimes used orally, as in formal sermons, radio news broadcasts, but never used for casual conversation. Thus, some objections could be raised as to the choice of MWA on the grounds that it is not a NATURAL LANGUAGE. Arabic speakers confront the dilemma of diglossia: each person speaks the regional dialect as his native language but is required to understand the more complex and more prestigious language of the Koran. This situation is portrayed quite clearly in Ferguson's

article "Diglossia" (Word 15, 1959):

Diglossia is a relatively stable language situation in which, in addition to the primary dialects of the language (which may include a standard or regional standards), there is a very divergent, highly codified (often grammatically complex) superposed variety, either of an earlier period or in another speech community, which is learned largely by formal education and is used for most written and formal speech purposes but is not used by any sector of the community for ordinary conversation.

This superposed literary language has been given different labels by different writers educated in the European tradition: thus one reads "Modern Standard Arabic", "Contemporary Arabic", "Modern Literary Arabic", "Contemporary Standard Arabic", etc., all of which are different versions of the same thing. What distinguishes MWA from the Classical Language is a matter of Vocabulary and Style. There are strong bonds of continuity, in morphology and syntax, with the Koran taken as the acme of perfection. The difficulty is that whereas the cornerstone of much syntactic analysis is the appeal to 'native intuition' users of MWA do not have as reliable intuitions about it as they have about whatever spoken variety of Arabic they have learned as their native language and use in informal situations. Although I am a native speaker of Arabic, having initially acquired my dialect of spoken Arabic, and having studied Arabic at school and in college, I still do not control this superposed dialect as well as I do my spoken dialect, and there is much scope for the users of MWA to develop different intuitions about what is acceptable and what is not.

Transcription (Adapted from Al-Ani 1970)

VOWELS

Description

i	short high front unrounded vowel
ii	long high front unrounded vowel
a	low short central unrounded vowel
aa	long low central unrounded vowel
u	short high back rounded vowel
uu	long high back rounded vowel

CONSONANTS

b	voiced bilabial stop
t	voiceless dental stop
t̤	voiceless 'emphatic' dental stop
d	voiced dental stop
d̤	voiced 'emphatic' dental fricative
k	voiceless velar stop
q	voiceless uvular stop
ʔ	glottal stop
j	voiced palatal affricate
ʕ	voiced pharyngeal stop
f	voiceless labiodental fricative
θ	voiceless interdental fricative
ð	voiced interdental fricative
s	voiceless dental fricative
s̤	voiceless 'emphatic' dental fricative
z	voiced dental fricative
ʃ	voiceless palatal fricative
x	voiceless velar fricative
ɣ /	

v	voiced uvular fricative
g	
h	voiceless pharyngeal fricative
.	
h	voiceless laryngeal fricative
r	dental trill
l	lateral dental
m	bilabial nasal
n	dental nasal
w	bilabial glide
y	palatal glide

CHAPTER I

1. Constituent Order in the Arabic Sentence

1.1. Preview

In this chapter, I shall be looking at the order of constituents in the Arabic sentence, and the grammatical and semantic effects of any change in the order of constituents. Three points will be discussed:

(1) postulating and defending a basic word order, to which other surface orders can be related; (2) the absence of a VP constituent in the basic, unmarked order; (3) discussion of ?inna, a verb-like constituent that may give further evidence for the word order to be defended.

Before discussing the order of constituents in the Arabic sentence, however, it is worth explaining what is meant by the term 'sentence'.

In their description of language, medieval Arab grammarians did not use any one term corresponding neatly with 'sentence'. Two terms occur, jumla and kalaam, and neither can be translated straightforwardly as 'sentence' or 'utterance'. The unit of language in al-kitaab is the kalaam, which is glossed as 'the way the Arabs speak'. This gloss is not self-explanatory and its elucidation must be the subject of another thesis.

The later grammarians categorised sentences into Nominal sentences - those beginning with a noun, hence jumal ?ismiyyat in Arabic - and Verbal sentences - those beginning with the verb, hence jumal fi'liyyat. - using the term jumla and not kalaam.

Sībawaihī, the forefather of Arab grammarians, considers the kalaam, as the largest unit of 'speech'. Nevertheless, he also uses the word jumla, 'at least seven times in the kitaab in meanings ranging from 'in

short' to 'a total'" (Carter 1968, p. 199). The fact that the Kitaab mentions the jumla means that this term was in existence but probably not clearly defined; or it could mean that the jumla was too vague a term for those grammarians to define. A later grammarian, Ibn Hisham, records that "every kalaam is a jumla but the converse is not true", and that "everything you say is a jumla, but not every jumla is a complete kalaam. These quotations from Ibn Hisham make it clear that jumla is not simply equivalent to 'sentence', nor kalaam to 'utterance'. What should be emphasised is that those grammarians were EXCLUSIVELY concerned with 'performance', for at least two obvious reasons: (a) they were comparing two modes of speech, prose and poetry; (b) they used the kalaam or utterance to denote specifically the WAY the Arabs spoke, Kalaamuhum "their way of speech" (cf. Sībawaihī).

By contrast, we can find the same rhetoric in modern linguistics towards the definition of the sentence. Thus, the word is sometimes used to refer to the actual sequences of sound produced by the speaker, sometimes to the written unit, and sometimes to a much more abstract 'thing'. In addition, utterances are sometimes used to refer to sentences; or we can say that many utterances relate to a single sentence (cf. discussion of this point in Bloomfield 1933, or Brown & Miller 1980). The word sentence, however, came to be used in an abstract sense as a unit described in the syntax at the abstract level of content. Such a view of the sentence as an abstract grammatical unit has rendered linguistic descriptions easy and feasible.

Another point merits mentioning here; the hearer acts as the 'monitor' and crucial factor in relating all sound vibrations to 'that' abstract sentence.

In other words, the repetitions of sounds and words are abstracted by the hearer to the extent that he can anticipate "what may come next".

We can say then that the sentence is an abstract unit, encompassing all related utterances of the speaker. It is this abstract unit that the linguist establishes and then proceeds to relate the range of utterances to it, explaining how the words or constituents are arranged within the sentence, and establishing 'dependencies' among those constituents, which leads to the "sentence". We can envisage the sentence as an abstract unit, postulated in order to account for the dependencies between units of syntactic structure.

This picture of the sentence as the largest or maximum unit of grammatical analysis is put forward more succinctly and convincingly by Lyons (1968):

"A sentence is a grammatical unit between the constituent parts of which distributional limitations and dependencies can be established, but which can itself be put into no distributional class".

(Lyons, p.173)

Rephrasing Lyons' words, we can say that formal statements can be made regarding the distribution of the constituents of the sentence, a notion based on substitutability, but not about the sentence itself; that is, whereas substitutability applies to constituents, it does not apply to sentences. Each sentence is distributionally independent of another sentence. However, the independence of one sentence from another does not mean that such sentences are not related in a text, for example. On the contrary, sentences are related to one another in a text, but this is a matter of semantic coherence or cohesion 'links' or devices.

As a final note, what Lyons' above definition implies is that any sentence is an abstract grammatical unit, i.e. grammatically complete, and it is this definition that we are going to use in subsequent discussion, namely in connection with constituent order in Arabic.

1.2 Basic Word order

Word order is used in all languages "to a greater or lesser extent as a marker of various functional relationships, but different languages impose different ordering restrictions and within any one language some ordering restrictions are strict and others admit of a greater or lesser degree of latitude "(Brown & Miller 1980).

Indeed, word order typology has become fashionable in linguistics, with typological arguments playing an important role in attempts to determine basic word order in particular languages. But discussion of this theme has been oversimplified in various forms since Greenberg (1963) presented his interesting typological data. Greenberg's concern was with "... the relative order of subject, verb, and object in declarative sentences with nominal subjects and objects". Clearly, when Greenberg characterised a language as SVO, SOV, or VSO, this characterisation was limited to a small area - though a central and important one - of the various construction types of that language: it dealt only with the dominant order in declarative main sentences with nominal subject and object. Greenberg's explicit assumption was "the vast majority of languages have several variant orders but a single DOMINANT one". Put differently, it can be said, accordingly, that languages that admit more than one order in their sentences are assumed to have one BASIC word order in relation to which other orders are discussed and described. On the other hand, the basic word order in a transformational grammar, i.e. the deep structure, can be the same as a surface order, but it need not be. An

order can be postulated that does not coincide with any surface one in order to allow for what the analyst perceives as the simplest account. One example is the VSO analysis proposed for English by McCawley (but never adopted by others). However, in most accounts of languages, and for particular reasons, we could expect the deep structure order to coincide with the neutral most frequent surface order, Dik (1978), commenting on Greenberg's afore-mentioned statement, says

"if ... we find the statement that this or that language is SOV etc. in writings of transformational orientation, something quite different (from Greenberg's assumption) is meant, namely that the order mentioned is the most PLAUSIBLE order of constituents in deep structure from which to derive the various actual surface structure orderings. In this usage one acts on the assumption that for any one language there is ONE single basic underlying order of constituents".

(Dik, p.171)

Rephrasing Dik's statement, we can say that a given order is ASSUMED or singled out as the BASIC one on grounds of Frequency of occurrence, Neutrality, or Unrestricted occurrence. In other words, the criteria for determining the basicness of one word order out of 'other' orders that a language may have, though not pragmatic, may correlate with the use of language as a signalling system. Consequently, a basic order is one which is pragmatically least-marked, i.e. it is the order in sentences which would "place the fewest restrictions on their contexts of appropriate use" (Keenan 1976, p.267). Syntactic structures that serve to draw a contrast are typically restricted in their occurrence and cannot be considered as exemplifying a basic word order.

Although Dik goes into a lengthy discussion regarding Neutrality or Unmarkedness of word order, expounding on Greenberg's assumptions, he ends up, implicitly, with the term Neutral to mean Unmarked.

It is not an easy task, however, to claim that a particular word order is the only basic one for this language or that, especially in terms of neutrality. But one can say that unmarked orders are more available to carry greater ranges of change in mood, voice, aspect, etc.; more available for embedding, nominalisation, and other syntactic constructions.

Givón (1979), working within a different 'theory', discusses the basic or neutral form, in reference to which all other syntactic types may be described. In Chapter II, "Grammar and Function", of his book Understanding Grammar, he moves towards a discoursal definition of syntax. He assembles a set of 'principles' which amount to a rejection of sentence-based syntax as the core component of linguistic theory in favour of a data-base consisting of some kind of corpus rather than certain intuitions about sentences. In fact, the reader can discern a general tendency in Givón's to extend the boundaries of syntax to embrace psychology, sociology and stylistics, and semantics and pragmatics. Furthermore, Givón SPECULATES on certain problems and difficulties in establishing neutrality or basicness; thus one feels that Givón is going to abandon structural or Formal criteria in favour of Pragmatic accountability. But this feeling does not last long enough before finding Givón himself conceding to recognise the "usefulness" of Formalism (cf. footnote 2, p.46). In brief, syntax for Givón has no special status as a defining characteristic of language though syntax itself has "highly specific structural properties" (p. 109). I have enclosed the word theory in parentheses since such a theory of data-base, being in its embryonic stage, cannot be on a par with, or as autonomous as, syntax, nor can it win over believers in generative syntax. Such students would argue that for discourse in general to define syntax,

it should take a giant step akin to that of the syntax of the fifties onwards, and that such a step should not reside in 'importing' external pressures or constraints from outside the system in order to shape language. This stance, however, does not imply the rejection of discourse; rather, discourse does help to elaborate on and add to syntax, without replacing it. Put differently, discourse cannot 'define' syntax; rather, it explains why there are different constructions like active, passive, cleft, etc.

Having said that, let us return to the issue at hand, i.e. the basicness of word order in Givón's discussion.

Givón admits that one "of the insights introduced into the study of syntax" (p. 45) is the notion of transformational relation, with the view that most sentence types are a 'variant' or function of the structure of some more basic "kernel" type. He goes on to say that this basic neutral sentence type, the main, declarative, affirmative, active clause, has enjoyed a privileged status as being the point of reference with respect to which all other syntactic patterns are described. Givón sets out to investigate the reasons of its 'immense durability' since it "has seldom, if ever, been challenged". He first summarises the arguments put forth by philosophers, philologists and grammarians into four types:

1. The completeness argument: Given the preliminary formalism-neutral goal (of attempting to account for the inventory of meaningful elements (lexical items) in a language and their distribution, one may observe that the greatest distributional freedom and variety of meaningful elements occurs in the main, declarative, affirmative, active clause type. This clause is the point of reference in syntactic description. This argument, Givón maintains, would leave many meaningful elements, both lexical and construction types, unaccounted for.

2. The Dependency argument: Formally, it involves the assertion that given the syntactic variants B,C,D and the neutral pattern A, one can show that the structure of B,C,D is a Function of A, but not vice versa. However, the 'utility' of this argument, says Givón, is not independent of questions of "complexity" and "economy".

3. The Economy argument: In the absence of any empirical grounds (i.e. data) for choosing between two alternative formalisms (models) which describe the data in an equally exhaustive fashion, the mathematically less complex model is to be preferred, and it is a general tendency in present-day linguistics for the practitioner to look for "substantive" reasons for preferring one formal model over another, i.e. to look for more data.

4. The Marked structure argument: In judging two transformationally related types, A and B, as to their "basicness", if one discovers that all components of A are also found in B but in addition another element, C, is also a component of B but not of A, and thus one considers C as the element which MARKS B as being distinct from A, then one is justified in considering A the basic, neutral, unmarked type, and B the marked type.

Discussing the four arguments above, and expressing his dissatisfaction over the 'contradictions' involved in these arguments - contradictions being the result of "depending on seemingly formal accounts", Givón concludes that "the least one could do is make the difficulties explicit" (footnote 6, p.47). He, however, does not deny the usefulness of the afore-mentioned arguments, for "they do indeed possess a considerable 'heuristic' merit as far as they go". He ultimately concludes that "since they are purely formal and system-internal, they contribute NOTHING to explaining why the syntax of human language is the way it is". Accordingly, one should "extend the discussion BEYOND the purely formal level

The reader is left to come up with his conclusion on Givón's conclusions.

On the other hand, Givón offers some insightful discussion of the "substantive" criteria for supporting the privileged status of the main, declarative, affirmative, active clause, though his data is of a meagre nature and cuts across various branches of philosophy, sociology, linguistics, stylistics on the one hand, and the components of semantics, syntax and pragmatics, on the other. Thus boundaries are 'blurred'. The criterion he offers, however, includes what he terms as "discourse presupposition", i.e. the degree of presupposed background upon which a sentence is used. The main declarative, affirmative, active sentence, thus, happens to have the LOWEST presuppositional complexity in discourse. Other syntactic variants are also gradable in terms of their degree of presuppositionality.

Here is a summary of his conclusions:

1. Syntactic variants which involve more presupposition than the neutral unmarked pattern exhibit more syntactic complexity.
2. Syntactic variants with more supposition show greater distributional restrictions than the neutral pattern.
3. Complex syntactic variants are acquired later by children. This is to say that pragmatics or communicative function is a much earlier process than grammaticalisation and children use parataxis to achieve various communicative effects.
4. More presuppositional variants tend to exhibit greater syntactic conservatism, especially in the area of word-order change.

(cf. Chap 2).

Clearly then, the definition of the basicness of word order depends on criteria which are essentially of a PRAGMATIC nature, and the analyst has to defend his choice of basic word order by pointing out the advantages it brings.

12.2.1. Basic Word-Order in Arabic:

Arab grammarians, both traditionalists and those trained in the European school, hold the common view that Arabic is a VSO language. Although various orders are exhibited in surface syntax, the basic order is believed to be VSO. Empirical evidence can be advanced to support this assumption. We start by considering a typical construction with its various syntactic manifestations. A transitive verb is chosen as the 'predicate' so that two arguments, a nominal subject and a nominal object, are present.

- | | | |
|-------|----------------------------|-----|
| 1. a. | daraba zeid-un 'amr-an | VSO |
| | hit Zeid-nom Amr-acc | |
| | 'Zeid hit Amr' | |
| b. | zeid-un daraba 'amr-an | SVO |
| c. | daraba 'amr-an zeid-un | VOS |
| d. | 'amr-an daraba zeid-un | OVS |
| e. | 'amr-un zeid-un daraba-hu | OSV |
| | Amr-nom Zeid-nom hit-him | |
| | 'as for Amr, Zeid hit him' | |
| f. | zeid-un 'amr-an daraba | SOV |
| | Zeid-nom Amr-acc hit | |
| | 'Zeid hit Amr' | |

The above examples exhibit various orderings of the three sentence-constituents, V,S,O. However, each order projects these constituents in a special way and serves a specific function.

In sentence (1a), which is believed to be the basic or least-marked order, it is the action 'Hitting' that is being predicated of 'Zeid'.

This is to say that 'Hitting' is what Zeid did to Amr. Notice that in the English sentence "John opened the door" 'John' is the theme, the entity about which the speaker makes a predication. 'John' is sentence-initial in English and this conforms with Halliday's notion of theme and rheme. The theme, for Halliday, is merely the starting point of the message, and in his scheme, the first constituent in the sentence, be it an adverb, a verb phrase, an adjective, or a noun, is the theme. On the other hand, we tend to speak of 'theme' in connection with nouns in English and the entire notion of 'theme' is based on the distinction between nouns and verbs. In other words, in unmarked sentences the theme is typically an NP. In Arabic, it is a 'different' state of affairs; the verb is already sentence-initial and consequently is the theme. Sentence (1a), and other similar sentences, seems to be the Least-marked. The term 'least' is used here for a variety of reasons, as will be shown later on. Yet, one reason can be given at this stage: the verb (action) can be easily brought into more prominence, without changing word order, simply by placing the emphatic particle "qad" or "laqad" immediately before the verb:

g. qad or laqad daraba zeid-un 'amr-an VSO
 did hit Zeid-nom Amr-acc
 'Zeid did hit Amr'

Notice that the function of the particle 'qad' is to focus one and only one constituent of the sentence, i.e. the verb. Such a sentence would be used to emphasise that Zeid, as the previous speaker thought, did indeed hit Amr.

Another way of focusing the verb is by having a nominal, called by Arab grammarians, the "absolute object", derived from the same verb:

h. daraba zeid-un 'amr-an darb-an
 hit Zeid-nom Amr-acc hitting-acc
 'It was hitting that Zeid did to Amr'

Sentences (1a,g,h) are examples of what will be called (cf.p.32), the

basic, unmarked construction, and in this construction, no matter how the verb is focused, the verb is always the first major lexical constituent. To anticipate slightly, (1b) is an example of another basic, but marked, construction, the Topic-Comment, which is discussed at length in Chapter IV. What is relevant here is that the construction is analysed as consisting of a Topic NP followed by a Comment S. It is possible to have a sentence such as Zeidun qad daraba Amran, in which the verb is not the first major lexical constituent in the whole construction. It is, however, the first major lexical constituent in the comment S.

The other variations (1b-1f) exhibit specific functions and serve specific communicative effects, and thus can be considered as different kinds of 'Focus' or emphasis. I would go so far as to say that because VSO has been taken to be the basic order, each constituent gains equal weight on the information scale and even intonation. In other words, if ANY Arab is given a sentence like (1a) and asked to read it aloud, no pause will be observed in his intonation nor can any significant information in terms of Focus be deduced from it, let alone the fact that if this Arab is asked to identify the 'focused', i.e. 'end-focused' or tonic (as in English), he will, after being 'taken aback' by your 'absurd' question, simply say "well, Zeid hit Amr", isn't that right?

Sentence (1b), on the other hand, which fronts the subject NP 'Zeid', makes this constituent more salient or prominent in the sentence. It constitutes the 'topic' about which something is said and thus new information is supplied, i.e. that he 'hit Amr'. In other words, this sentence is used to express a statement about 'Zeid', who is known to the speaker and addressee from previous context, and which, consequently, constitutes old information, or the topic. This sentence can be an answer to a question like:

2. maaʔaa fa'ala zeid-un
what did Zeid-nom
'What did Zeid do?'

This question then establishes 'zeidun' as old information for subsequent discourse, and in answer to this question, 'Zeid' would become the topic of the 'message' followed by the new information predicated of it, namely "daraba 'amran". Notice that (1a) could also be an

answer to (2); however, (1b) is 'marked', i.e. ^{typically} occurs as an answer to (2). This is also the case with (1e) and (3) below.

In sentence (1e) a ^{functional} parallelism to (1a) is found; with 'Amr' in the nominative case leaving a pronoun -hu, coreferential with 'Amr', in its original place, the sentence can be taken as a response to the question:

3. maa^ʔaa ha^ʔdaa li-'amr-in
what happened to-Amr-gen
'What happened to Amr?'

The answer makes 'Amr' the topic, the entity about which something is said, namely that "zeidun darabahu", "Zeid hit him", which constitutes new information. Moreover, 'Amr' is more in focus in (1e).

Sentence (1d) serves only one function, and with the object NP 'Amr' preposed sentence-initially, this sentence can ^{typically} be an answer to the question:

4. man daraba zeid-un
whom hit Zeid-nom
'Whom did Zeid hit?'

We can observe here that 'Amr' provides the new focused information.

However, this is only one way to answer the above question; another way would be:

daraba zeid-un 'amr-an
hit Zeid-nom Amr-acc
'Zeid hit Amr'

which is again of the VSO order!

Sentence (1f) can be an answer to the following question:

5. zeid-un man daraba
Zeid-nom whom hit
'As for Zeid, whom did he hit?'

where the subject 'Zeidun' is fronted and the object 'Amr' is also preposed between the subject and the verb. In fact, Zeid, in addition to being given, is focused, and ''amran', being pre-verbally displaced from its original place in the sentence, is also focused.

Sentence (1c) has a distinctly Pragmatic function, i.e. CONTRASTIVENESS. Such a sentence can be typically used as a contradiction to a previous statement by the addressee, like:

6. daraba Zeid-un Muhammad-an
hit Zeid-nom Muhammad-acc
'Zeid hit Muhammad'

We can imagine a situation like the following: the addressee was asked to read a paragraph and then relate what he has read. I, the listener, act as his monitor. At this stage I interfere and say "daraba 'amran Zeidun", in order to draw his attention to this 'error'.

It is clear from the previous discussion that of all other sentences, sentence (1a) happens to be the least marked, with VSO as the DOMINANT order. In other words, this sentence carries the lowest presuppositional background, and no specific constituent is more salient than the other.

Further support for the VSO order comes from the frequency of its occurrence: questions about the state of affairs, like

7. maaʔaa ʔadaʔa
what happened
'What happened?'

are invariably answered with the VSO form:

8. ihtalla al-ʔisraaʔiiliyyuun janub-a lubnaan
occupied def-Israeli-pl South-acc Lebanon
"The Israelis occupied South Lebanon".

Furthermore, going through the pages of any text or reference book written in Arabic, or reading through any Arabic newspaper or magazine, where there is no face-to-face encounter between the 'speaker' (here writer) and the addressee, with concomitant paralinguistic features, one invariably finds that the VSO pattern is dominant. Examples to illustrate the point above will be given in subsequent sections and chapters.

The unmarkedness of the VSO gains further support when its greater syntactic distribution is considered. Thus, while embedded clauses show both VSO and SVO orderings, there are other structures which are predominantly VSO. Questions, nominalisation and embedded sentences with particles as complementisers exhibit the VSO order. This will be discussed in great detail later on.

We may also mention ambiguous contexts, where no morphological information is available as a signalling device to mark the agentive, accusative, or genitive case. Thus definite and indefinite common nouns exhibit the above three cases with the following markings, respectively: /-u : -un/, /-a : -an/, /-i : -in/. The previous sentences serve as examples. It is also worth mentioning that 'Zeid' and 'Amr' are 'inherently' definite, being Proper Nouns, and that Proper Nouns take only the -un, -an and -in suffixes. However, there is another group of proper nouns, usually called defective nouns since the last radical is a long vowel rather than a consonant, which do not exhibit such overt markings. Consider the following sentences:

9. daraba muusaa 'iisaa
 hit Musa-Ø Isa-Ø
 'Moses hit Isa'
10. raʔat leilaa hudaa
 saw Leila-Ø Huda-Ø
 'Leila saw Huda'

In the above examples the nouns 'muusaa - 'iisaa - leilaa - hudaa' do not show any overt case marking. The only possible order envisaged

is that of VSO, even to the point of EXCLUDING the VOS order. This is to say that Arabic word order VSO is so strict that it cannot tolerate any variation as long as there is no morphological/^{or semantic} information available to permit such variation. Consider the following sentences, where both semantic and morphological information is available:

11. raʔaa muusaa hudaa VSO
saw Musa-Ø Huda-Ø
'Moses saw Huda'
12. raʔat muusaa hudaa VOS
saw-fem Musa-Ø Huda-Ø
(t gender marker)
'Huda saw Moses'
13. iʃtarat leilaa ḥalwaa VSO
bought Leila-Ø sweets-Ø
14. iʃtarat ḥalwaa leilaa VOS
bought sweets-Ø Leila-Ø
'Leila bought (some) sweets'

In the first two examples above, the disambiguating factors are morphological, particularly with the feminine-gender-marking suffixed to the verb. In the second pair (13 + 14) the disambiguating factors are semantic: Huda is the agent; she bought the sweets. Thus selectional restrictions determine the correct interpretation we have in those sentences. In other words, where there can only be one 'normal' interpretation, the basic order can be varied, even with invariable nouns. (cf. Lyons (1968): nouns are typically agents and the typical declarative sentence in English is taken as saying something about a human being doing something to an inanimate object..).

Finally, we can list Greenberg's typological characteristics of VSO languages: the use of prepositions, governing nouns precede their genitives,

modifiers follow the modified nouns, which gives support to the VSO basic word order assumption. As I said at the beginning of this discussion, Greenberg's assumptions have been oversimplified, and it cannot be concluded that a hitherto unknown language X has VSO word order because it has the characteristics that in other languages accompany VSO order. Smith (1981) gives a very good discussion of this point in *Journal of Linguistics*, No. 17: (pp. 39 - 53).

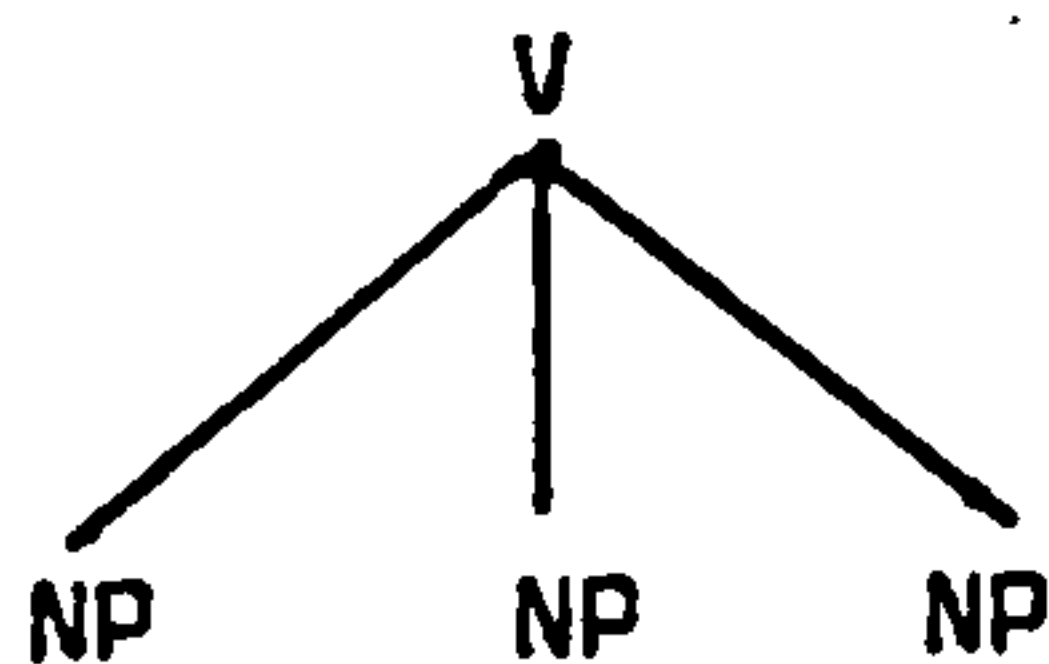
11.3. Underlying Word Order:

With the appearance of Syntactic Structures and subsequent literature on Transformational Generative Grammar, the question of basic word order came to acquire a new dimension. Among the axioms of the Transformational Theory is the positing of two layers of syntactic structures: a deep underlying structure generated by the phrase structure rules, and a surface structure as the output of the transformational rules applied to the deep structure. The PS-rules would generate structures which are linearly ordered and this order of constituents at this level resembled their order at the surface structure unless there was reason to postulate a different order. For detailed discussion and argument regarding this theory, the reader is referred to the literature, especially the classics, on this topic. But we can cite one reason for positing two structures. It was felt necessary to posit an underlying structure that would relate other structures through a series of transformations. The ordering or unordering of constituents in deep structure constituted an area of controversy among linguists. Fillmore (1968), for example, has the first rule as (S \rightarrow Modality + Proposition). Leaving modality aside, he expands the "Proposition" to produce the verb followed by an array of nominal elements which go with the verb:

15. Proposition \rightarrow V (Objective) (Dative) (Instrumental)
(Locative) (Agent) ... (S)

These nominals are introduced with the names of their functions. A further rule specifies that they are NPs.

It is obvious in Fillmore's model that it is the verb which is the nucleus of the proposition. His model actually allows a deep structure different from surface structure, and Fillmore was essentially attempting to capture facts about dependency relations (see below), constituent structure being reserved for the surface. The choice of the verb would determine the ordering of the nominal elements. Thus, if the verb is 'open', followed by 'boy', 'key', 'door', - unordered - then one constituent assumes precedence over the other, depending on its deep case; i.e. the agentive overrides the objective which in turn overrides the instrumental. Certainly, Fillmore could just as well have postulated an order $\text{Case}_1 \dots \dots \text{Case}_n \text{ V}$, since he aimed to show that the NPs were equal in status, rather than that the verb had to be first.



McCawley (1974) adopts a logician's point of view regarding the constituents of the English sentence. He defends a predicate-initial sentence where "semantic representations correspond to a word order in which verbs precede their subjects". He ultimately ends up with a VSO order for the English sentence since the Predicate is in "a special position" due to its "special role in the proposition". He states that

" a language with underlying predicate-first order would retain predicate-first order throughout the cycle and could become a surface Verb-second language only through a post-cyclic transformation of V-NP inversion".

It should be mentioned, however, that McCawley tries to 'impose'

probably an imaginary word order on the facts of English. Moreover, his argument rests on transformations that many linguists have abandoned.

We mentioned above that the PS-rules would generate structures which are linearly ordered. However, this linearity or ordering of constituents, as we have seen, has been challenged by scholars, some of whom were trying to account for the syntax of languages with surface FREE order.

Staal (1967), discussing word order in Sanskrit, challenges an ordered base and calls for Free word order particularly for inflected languages like Sanskrit and generally for other languages. Ordering could come at a later stage. Thus, instead of Chomsky's first rule ($S \rightarrow NP-VP$), Staal introduces his base rule (and similar ones) as:

$$\begin{aligned} S &\longrightarrow \{NP, VP\} \\ VP &\longrightarrow \{NP, V, NUM\} \text{ etc.} \end{aligned}$$

In other words, the rules of the base are constructed so as to introduce sets which are in hierarchical order of subsets containing elements dominated by a single node. Grammatical relations in the sentence are expressed by inflections and the like, and word order has no grammatical significance. Staal thus states categorically that "The order of words of the sentence has no significance, it is entirely superficial" (p. 61); an erroneous conclusion.

Shaumyan (1977) offers a model which has an order - free deep structure (though his model does not have a TG-type of deep structure).

What can be observed here is that, apart from Shaumyan's model, the idea of unordered deep structure is associated with theories that give constituent structure a subordinate position and put in the forefront roles or grammatical relations.

Relational grammar has suggested a linearisation rule that assumes

unordered underlying structures as well. However, since there is more than one admissible surface structure in a language, it does not become a theoretical necessity to adopt an unordered deep structure proposal since these different surface structures can be related to an ordered deep structure through transformations. Also, ordered deep structure does not have to be assumed as a theoretical necessity if linearisation rules can be easily formulated; in fact, anyone who has tried to write explicit linearisation rules has found the task exceedingly complex. (cf. Fillmore, 1968)

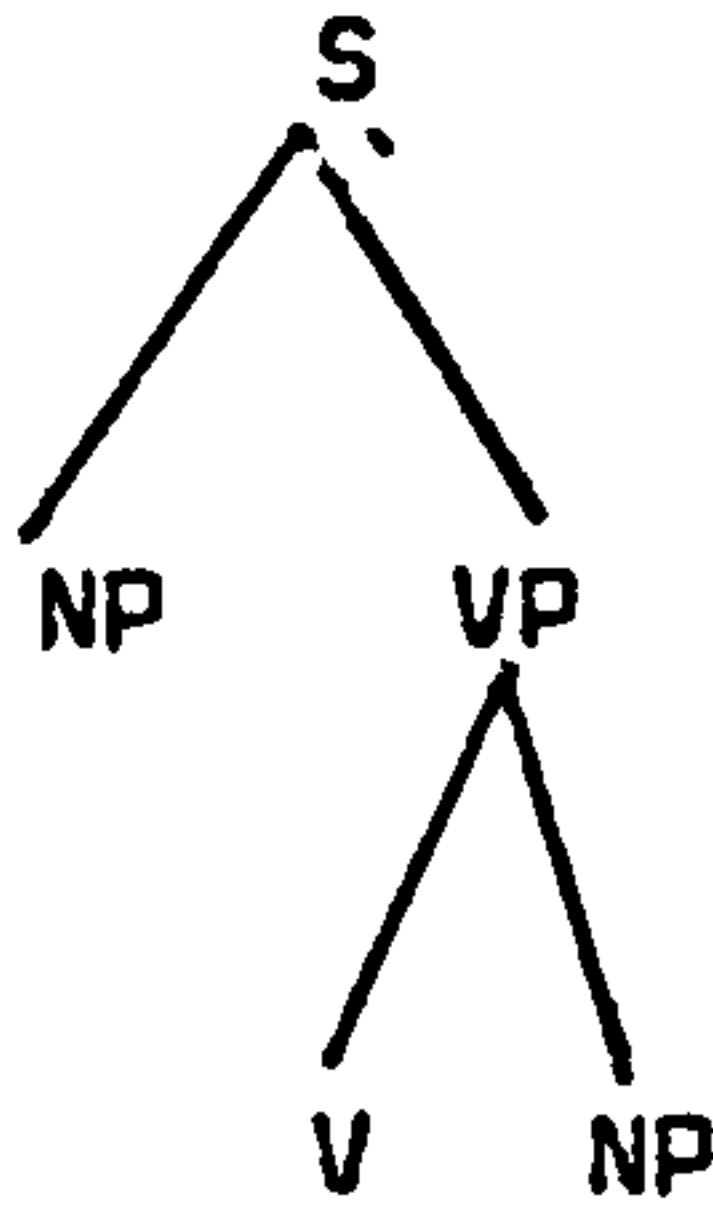
Another motivation for an unordered base or underlying structure lies in the fact that there was no need to impose order on constituents generated by the PS-rules at the level of deep structure, since grammatical functions like 'subject of' and 'object of' do not need to be defined derivatively from the concatenation of syntactic categories in the phrase marker, and are introduced as features that mark syntactic categories in deep structure (Johnson 1976). Of course, one can discern some dangerous assumptions when studying the Relational Grammarians, who assume that notions like subject are universal. Chomsky (1965) maintains that grammatical functions can be defined in terms of the categorial phrase marker. He says:

" ... The information concerning grammatical functions ... can be extracted directly from the rewriting rules of the base, without any necessity for ad hoc extensions and elaborations of these rules to provide specific mention of grammatical functions. Such extensions, aside from their redundancy, have the defect of failing to express properly the relational character of the functional notions and are thus useless in all but the simplest cases".

(Aspects, p. 73)

In other words, what Chomsky says is that given the following phrase marker for the sentence "John will post the letter".

16.



we can extract the information regarding grammatical relations from the rewriting rules of the base, illustrated by the tree configuration so as to avoid having to elaborate the rules to provide specific mention of grammatical functions. Thus, the 'subject of' is defined as [NP, S] the left-most node which is directly dominated by S in the phrase marker associated with the sentence; 'predicate of' as [VP, S]; and 'object of' as [NP, VP], etc.

Chomsky goes on to say that

"The general significance of the definitions ... depends on the assumption that the symbols S, NP, VP, N, and V have been characterised as grammatical universals".

(Ibid. pp. 72-73)

Chomsky's position depends on an ordered deep structure, and the order, of course, is that of the active declarative sentences in English

It was also assumed that the definition of grammatical functions cannot be derived from the rewriting rules in any way other than that depending on the direct dominance of the S and VP nodes, which in turn presupposes the existence of such nodes, particularly the VP node, in the phrase structures of ALL human languages. Bach (1974) advanced a proposal for a universal base which was a result of preserving a universal definition of grammatical functions. Such a proposal would exclude the possibility of

a base of the type VSO in any language; in other words, a VP node would not exist in this configuration - unless, probably, discontinuous constituents are introduced in our account -, and consequently no grammatical functions can be defined in terms of the afore-mentioned scheme. Thus, the only admissible or possible orders in the base, universal or particular to languages, are SVO, SOV, VOS, and OVS. Clearly, then, Arabic and other languages with VSO surface order were assigned a different underlying order because the assumption about the correspondence between deep and surface structures, and the assumption about the universal definition of grammatical functions which crucially include reference to a VP constituent could not be made compatible.

Yet, Chomsky states

"... it is likely that these definitions (of grammatical categories) are too restricted to serve as general explications for the traditionally designated grammatical functions in that they assume too narrow a substantive specification of the form of grammar".

(Aspects, p. 73)

Chomsky thus leaves the door open for some 'other' grounds for the definition of grammatical functions, like linearity of constituents, or simply linear order which the different NP constituents can assume in relation to the verb. This furnishes alternative grounds for defining grammatical functions and makes it possible to posit underlying structures for VSO languages. The first NP, then, after the verb will be defined as subject, the second NP as object. Moreover a phrase structure rule that expands or rewrites S as [V-NP-(NP)] would still raise the question of the absence of an already universally assumed VP node.

Anyhow, the VP constituent as a universal category has been recently

challenged. (cf. Schwartz 1972). This point will be made clearer later on. What can be said at this stage is that if there is no evidence in the clause structure of a language for a VP-constituent, then there is no theoretical necessity for positing an underlying structure where the verb is immediately followed by the object-NP, or to define the grammatical function 'object of' in terms of the immediate dominance of the VP.

1.3.1. Underlying Word Order in Arabic:

In the previous section, three main points were discussed: the admissibility of phrase structure configuration, the definition of grammatical functions, and the universality of the VP node. On the basis of such discussion, earlier transformational accounts of Arabic and of other languages with a VSO basic word order - assumed an underlying structure in which the order of constituents, SVO, was different from that of the basic surface structure.

In three PhD dissertations, to which I had access and which were done within the framework of generative transformational grammar, an underlying SVO order has been assumed, by rewriting S in their phrase structure rules as either [NP-VP] or [NP-Pred P]. These studies were done by J.A. Snow (1965), M.C.G. Killean (1966), and N.M.K. Lewkowicz (1967, 1971). In another paper by F. Anshen and P. Schreiber (1968) the underlying structure VOS [Pred P - NP] or simply [VP - NP] is proposed. These studies provide no empirical evidence for their choice of an underlying structure for Arabic, nor do they discuss why they should be preferred to a VSO underlying structure, with the exception of Snow (1965).

Killean (1966) posits her PS-rule as follows:

17. PS 1 S \longrightarrow NP + Pred P

and goes on to 'justify' that in the following manner:

"By a metatheoretical convention (Chomsky 1965, pp. 71-74) the NP of S (symbolised [NP, S]) defines the notion "subject-of-S". No other notation in the deep structure is needed other than this basic configuration to define the notion of the subject of a M(odern) W(ritten) A(rabic) sentence".

(p.41)

However, Killeen goes on to say

"Normal, unemphatic word order for the type of sentence mentioned above is Verb-Subject-Object in MWA".

(Ibid. pp. 41-42)

As has been argued earlier, there is no need for such a 'metatheoretical' convention for positing such underlying structure.

Lewkowicz (1971) formulates her first PS-rule as $[S \rightarrow NP + Pred]$. —

She mentions the reason for such a stance as follows:

"I use the initial order [NP + Pred] because I am familiar with it, and because I have not had an opportunity to explore the ramifications of the [Pred + NP] order proposed by Anshen and Schreiber in the first rule of their grammar".

(footnote 10)

Furthermore, rewriting S as [Pred P - NP], she says, is not going to affect her analysis:

"As far as I can see, the points made in the present article (Topic-Comment and Relative Clause in Arabic) hold true regardless of which order is assumed to be the basic one".

(Ibid.)

It is quite obvious that Lewkowicz's choice was between structures which are basically SVO and VOS, without considering the possibility of a VSO.

Anshen & Schreiber (1968) give no reason for their PS-rule

$[S \rightarrow Pred Phr + NP]$:

"We have not formalised a rule ... Such a rule is probably necessary for independent reasons; e.g. to move the subject to the left of the object and adjacent to the verb in verbal sentences".

(footnote 3, p. 793)

Snow (1965), however, defends his PS-rule $[S \rightarrow NP-Pred\ Phr]$, i.e. SVO, on empirical grounds. He states in a footnote that:

"The constituent order of 'subject-predicate' may be disputable on statistical grounds (though this is by no means certain), but it is chosen here because the statement of concord is simpler and the overall grammatical statement is simpler".

(footnote 1, p.12)

But both claims can be disputed:

As for "the statement of concord will be simpler", Arabic verbs generally agree with their subjects in person and gender. If these subjects are to the left of the verbs, the verbs agree with the subjects in number while no agreement in number obtains between a verb and a subject following it. This point will be discussed later on (see examples (18-21) on the following page). However, it remains to be emphasised here that agreement in number when the subject is to the right of the verb is NOT allowed in Arabic. Morphologically, the number agreement marker for singular subjects is \emptyset . The singular form can be assumed to be the unmarked form of number-agreement. On the other hand, the marked forms are those of dual and plural subjects.

As already mentioned on p. 10, MWA is regarded here as having two basic constructions, both generated by the PS rules, but one being unmarked, the other marked.. (18b), (19b), (20b) and (21b) are instances of the marked one, the Topic-Comment structure. The complexities of number agreement can be handled in a description that takes VSO as the basic unmarked order, treats the Topic-Comment construction as a separate basic construction also generated by the PS rules, and puts all Morphology into the lexicon. The forms with no number

agreement have subcategorisation frames allowing them to be inserted in the unmarked construction; forms with number agreement have frames allowing insertion only into the Topic-Comment construction. (For further details, cf. pp. 164 - 166). That is, Snow's assertion about basic word-order has been undermined by later developments in generative grammar, and it is doubtful whether the handling of morphology by the transformational component could have coped with the data in (18) - (21) without becoming involved with the deletion of morphological markers or with complex structural analyses in the statements of transformations.

Let us consider the following sentences:

18.a. raja'a al-musaafiruuna
returned def-travellers

b. al-musaafiruuna raja'uu
The travellers/p.m. returned

19.a. raja'a zeid-un wa 'amr-un
returned Zeid-nom and Amr-nom

b. zeidun wa 'amrun (d.) raja'aa
'Zeid and Amr returned'.

20.a. ištaraṭ hudaā wa leilaa jariidat-an
bought Huda and Leila newspaper-acc

b. hudaā wa leilaa ištaraṭaa jariidat-an
Huda and Leila (d.) bought a newspaper.

21.a. taṣilu al-mu'allimaatu ʔila al-madrasat-i sabaah-an

b. al-mu'allimaatu yaṣilna ʔila al-madrasat-i sabaah-an
def-teachers arrive to def-school-gen morning-acc

'The teachers (f.p.) arrive at school in the morning'

In the (b) sentences above, the number agreement markers on the verb are /uu/p.m.; /-aa/d.; and /-na/ p.f. These markers were considered by Arab grammarians as subject-pronoun clitics, and the (b) sentences and the like were considered of the Topic-Comment type (which will be discussed in detail in Chapter IV). As such, the sentence-initial NP is the topic, followed by a comment which is a sentence beginning with a verb followed by a 'dependent', i.e. 'clitical' subject-pronoun. The first NP is not a subject, according to those grammarians, but a topic because subjects do not precede their verbs, and also because the verb has a subject, i.e. the clitical pronoun, and since there is only one subject to the verb the NP

to the left of the verb cannot be considered a subject.

We can find support for the above point by considering 'similar' structures which are unambiguously of the 'topic-comment' type, and where the topic is coreferential with the subject of the sentential comment; in the comment, there is no overt subject and the verb of the comment is marked for number, as in the following example:

22. al-ʔawlaad-u mataa raja'uu min al-madrasat-i
def-boys-nom when returned from def-school-gen
'The boys, when did they return from school?'

The fact that the verb raja'uu in such sentences has to be marked with number agreement was taken as an indication that the number agreement markers are subject pronoun clitics, otherwise, the comment sentence would be subjectless.

In addition, independent sentences can surface without an overt, independent subject. The verb will have to be marked with number agreement. Thus, the answer to a question like:

23. kayfa raja'a al-junuud-u
how returned def-soldiers-nom
'How did the soldiers return?'

can be

24. raja'uu muntasiriina
returned victorious
'They returned victorious'

In sentence (24), there is no overt subject. The verb, however, shows number agreement, and such 'independent' sentences give support to the opinion that these number markers on the verb are themselves the subjects, in clitic form

As for Snow's second claim that "the overall grammatical statement is simpler", by positing the PS-rule [$S \rightarrow NP\text{-}Pred.\text{ Phr.}$], or simply SVD

as the underlying order, it seems, to me, to be an unwarranted conclusion.

Let us pause here and consider the notion of simplicity.

Chomsky (1965) writes:

"... it is being assumed that "simplicity" is a general notion somehow understood in advance outside of linguistic theory. This is a misconception, however ... "simplicity" ... is to be defined within linguistic theory."

(Aspects p. 37)

He goes on to say

"A priori, there is no way to decide which of the two (hypotheses, rules of grammar) is correct. There is no known absolute sense of "simplicity" or "elegance", developed within linguistic theory ... in accordance with which Tu(unordered) and To(ordered)) can be compared ...

One can easily invent a general concept of "simplicity" that will Prefer Tu to To, or To to Tu; in neither case will this concept have any known justification".

(Ibid. p. 39)

Returning to Snow's 'conclusion', such a conclusion could be quite legitimate if we had two complete syntactic accounts of Arabic, based on the same theoretical principles, but with different hypotheses about the underlying structure. Thus, a meaningful comparison could be carried out to decide which of the two warrants the simpler, OVERALL grammatical statement. All that has been done on Arabic syntax so far is of a fragmentary nature, dealing with a particular phenomenon such as Topicalisation or focusing, Relativisation, and so on. Consequently, we can adopt a weaker view. We can take a fragment of grammar and conduct a comparison between two accounts of this fragment. Then we can decide, on empirical grounds, which of the two is more accurate on the levels of observational and descriptive adequacy. Even then, the validity of our evaluation would

be considerably weaker since our choice would be based only on a fragment of the grammar.

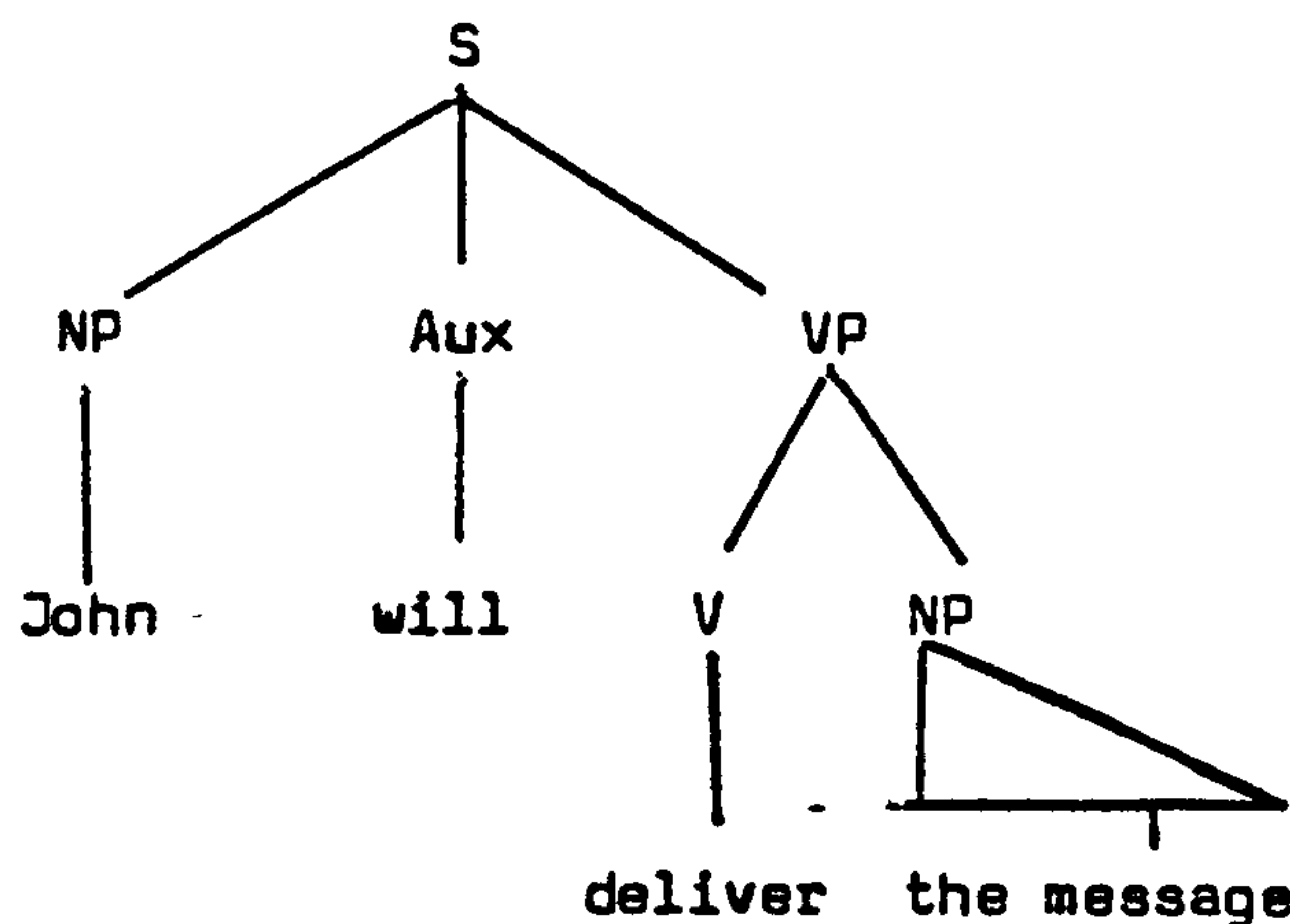
We may now take up Snow's account of SVO and suggest ours as well - VSO - to make such comparison. Thus, the two PS-rules at hand are

25. 1. Snow's $S \longrightarrow NP-Pred P$
2. Alternative $S \longrightarrow V-NP- \dots$

Two points should be mentioned here: (1) the criteria for defining grammatical functions here are expanded to include linearity of constituents; (2) in our alternative PS-rule (akin to Bakir's 1979), a VP category is absent. However, if it turns out that a VP category exists in Arabic, then our assumption will lack observational adequacy.

Certain features are usually set up and considered as tests for string constituency. This is to say that a given string of elements is said to be a unit if it meets certain 'diagnostics' (Radford 1981) or criteria which include (a) distribution, i.e. if a given string of elements behaves distributionally or recurs as a single unit in a variety of sentence-positions (b) deletability or omission under appropriate discoursal conditions (c) replacement by a pro-form and (d) interruptibility or resistance to allowing any parenthetical material to intervene internally, i.e. within the phrasal category. Schwartz (1972) advanced this weaker test, i.e. resistance to interruptibility. Let us illustrate with some examples from English first.

In the English sentence "John will deliver the message", with the following surface syntactic structure



"deliver the message" is a constituent - a VP. Distribution would lead us to expect this unit to recur as a single chunk in different positions:

26. (a) John said that he will deliver the message,
and deliver the message he will.
- (b) What will John do - deliver the message?
- (c) What John will do is deliver the message.
- (d) John will do one thing - deliver the message.
- (e) Speaker: What will John do ?
Hearer: Deliver the message.

Interruptibility, though a weaker test, would also show that "deliver the message" is one structural unit in English:

27. (a) John will certainly deliver the message.
- (b) John certainly will deliver the message.
- (c) ? John will deliver certainly the message.
- (d)* John will deliver the certainly message.

The pro-form criterion would also suggest that "deliver the message" is one constituent in English:

28. (a) John promised that he will deliver the message,
which he will.

(b) John said that he will deliver the message, and so he will.

(c) John will deliver the message, and so will Mary.

(d) John: I will deliver the message.

Hearer: You will what?

Finally, deletion or omissibility would also show that "deliver the message" is one chunk, since it can be deleted in an appropriate context:

29. (a) Who will deliver the message?

(b) John will.

Although such criteria are adopted and defended by linguists, they are still questionable, or at least some of them are. Take the pro-form test, for example. In a sentence like.

30. John delivered the letter, and so did Mary

not only do we have so but did as well. In fact both should be in the sentence in order for the latter to be grammatical:

31. * (a) John delivered the letter, and so Mary.

* (b) John delivered the letter, and did Mary.

In (28 a-d) above, this presents no problem, since we have which, so, or what replacing the VP "deliver the message". The question in relation to (30) is this: If did is the pro-form for the VP, what will the status of so be, or vice versa? Moreover, even the distribution test and the pro-form test can still be questionable; in (26b, c,e) we have both what and do-. Notice also the pro-forms in this sentence:

32. (a) Speaker: John delivered the letter

Hearer : John did what ?

(b) * John what ?

When string constituency tests are applied to MWA, they yield a different result from that obtained for English. The important construction here is the one that is taken as basic and unmarked: the declarative construction in which the verb occurs in sentence-initial position followed by a subject NP and an object NP; in that order. Example (1b) shows a verb followed immediately by an object NP, with the subject NP in sentence-initial position, but this represents a different, marked construction, to be generated by a special PS rule. (1c,d,f) show various word orders, but these constructions are marked and non-basic, i.e. derived by transformation. In the basic, unmarked construction, then, with a full subject NP, the verb is always separated from the object NP and the two cannot be seen as forming one constituent.

At this point it is appropriate to mention an important principle in traditional Arabic grammar which relates to the views of many modern linguists who reject the verb phrase constituent. The latter employ representations of sentence structure that show the verb as the head or central constituent of the sentence, with all the NPs being modifiers of the verb. The VP constituent obscures this view, since it makes the grammatical subject occupy a position of prominence, with only the direct and indirect object NPs and any complement NPs being at least equal in rank to the verb. ('Rank' is not used here in its Hallidayan sense.) Within TG, the earliest proponent of the verb-central analysis was Fillmore (1968).

Traditional Arabic grammar has a principle called the Regent-Operative Principle, which states that in certain groups of constituents there is a governing or head constituent (the regent) that controls the morphology of the governed constituents (the operatives). In the sentence as a whole the verb is the regent and the nouns are operatives: that is, the verb controls the addition of the case suffixes, including the nominative suffix, to nouns. This is a view that never gained wide covering in

traditional Western European grammar with its Subject-Predicate analysis of the sentence.

Other regents are prepositions in prepositional phrases and the nominative or accusative noun in the genitive construction:



For present purposes, the regent-operative principle can be extended to take in the $\left[\begin{array}{c} \text{NP} \\ \text{NP} \end{array} \right. \text{Adjective} \left. \right]$ construction where the adjective agrees with the head noun in number and case. The head of a construction is easily recognised in the X-bar type of representation: whatever X is, it is the head of the \bar{X} construction in which it occurs: i.e. of the constituents dominated by any \bar{X} , X is the head. This Regent-Operative or Head-Modifier analysis will be of vital importance in the discussion of constituent-movement by the rule of Verb Attraction in Chapter II.

Let me note that Chomsky's EST representations of sentence structure do not show that the verb is the head of the sentence, but Jackendoff's representations can be so interpreted. I have used Chomsky's representations for present purposes, as there is no loss in failing to show explicitly that the verb is central.

Returning to the point under discussion, i.e. VP constituent, we may note that even in embedded clauses, where one would hope to find a VP constituent consistently in Arabic, one's expectations are soon disappointed. Two examples will illustrate this point:

33. (a) ?araada muhammad-un $\left[\begin{array}{c} ?an \\ \bar{S} \end{array} \right.$ yaktuba risaalat-an]
- V S V O
- wanted Muhammad-nom that write letter-acc
- 'Muhammad wanted to write a letter'

(b) talaba al-ʔustaaʔ-u ʔan yuḥdira muḥammad-un waalid-a-hu]
 5

V S O

asked def-teacher-nom that bring Muhammad-nom father-acc-
 his

'The teacher asked Muhammad to bring his father'

Consider further these sentences where we have both the grammatical subject and object as pronouns in emphatic contexts (where the order is strict):

34. (a) ʔaxaʔtu ʔanaa al-kitaab-a VSO
 took-I def-book-acc

(b)* ʔaxaʔa al-kitaab-a { -tu }
 { ʔanaa }

took def-book-acc I

(c)* ʔaxaʔtu al-kitaab-a ʔanaa

35. (a) saʔal-tu 'aliyy-an maa al-xabar
 asked-I Ali-acc what def-news

(b)* saʔala-hu-tu maa al-xabar
 asked-him-I

(c)* saʔal-tu maa al-xabar -hu
 asked-I what def-news -him

We also mentioned that deletion can apply to English, whereby the whole VP or only the Verb can be deleted, as in (29) above and (36) below:

36. John posted the letter and Mary -- the parcel.

In contrast, only the verb can be deleted in Arabic:

37. iʃtaraa muḥammad-un kitaab-an wa 'aliyy-un ... qalam-an
 bought Muhammad-nom book-acc and Ali-nom pencil-acc
 'Muhammad bought a book and Ali a pencil'

If sentences such as Zeidun daraba 'amran wa qatala fu'aadan

"Zeid hit Amr and Killed Fuad" were possible, they could be considered as providing evidence that VP is an appropriate constituent in descriptions of Arabic, since there would be apparent instances of conjoined VPs.

Two objections can be put forward. The first is that the native speakers of Arabic I have had the opportunity to consult do not accept the example.

(One native speaker out of five thought at first that it was acceptable but subsequently changed his mind.) The second objection is that the

sentence can be taken as an example of the Topic-Comment construction, with the Topic NP, Zeidun, followed by two conjoined Comment sentences.

To complete the case against VP in Arabic, let us note, firstly, that the word order exemplified by daraba 'amran wa qatala fu'aadan Zeidun "hit Amr and killed Fuad, Zeid" is also impossible, and, secondly, that Zeidun daraba Amran is always marked. None of my informants accepted it as a response to the question maa'aa fa'ala Zeidun ('What did Zeid do?')

As for the pro-form test, two points can be forwarded in its favour:

- (a) constructions like fa'ala haa'aa or fa'ala ka'aa "did that" or "did like that" are available in Arabic but, in very restricted contexts;
- (b) the pro-forms typically occur in translations.

To illustrate the first point, let me relate this short story:

It is said that when the Word of God was revealed to Abraham, Abraham was ordered to summon his folk to believe in it and adhere to it.

Those people were infidels, i.e. stone or idol-worshippers. Some believed

in Abraham's message, others resisted. Abraham got angry and smashed the idols while the folk were away from the temple which contained the idols. When they returned and saw the condition of their gods, i.e. the stones, they in turn got furious and suspected Abraham. They put the following question to him: "man fa'ala haa^xaa bi ?aalihatinaa yaa Ibraahiim?" "Who did that to our gods, Abraham?"

What I want to say actually is that this pro-form construction is found in specialised contexts, in fact in rhetoric, a matter of specialised styles. Does it exist in MWA ? I doubt it.

As for the second point, i.e. translation, we find constructions like "fa'ala ka^xaalika" 'did like that' under the influence of translations; this is to say that a linguist, sometimes like a magician, tries to apply certain techniques in order to prove a point. The point is that such constructions are not 'welcomed' in MWA. Given the following two sentences:

38. (a) qara?a xaalid-un al-qasiiidat-a wa fu?aad-un fa'ala ka^xaalik
read Khalid-nom def-poem-acc and Fuad-nom did like that
'Khalid read the poem, and so did Fuad'
- (b) qara?a xaalid-un al-qasiiidat-a wa qara?a-haa
read Khalid-nom def-poem-acc and read-it
fu?aad-un ?aydan
Fuad-nom also

I will definitely choose (38b), for (a) is just 'not O.K.'

What can be concluded from the above discussion is that the verb and its complement in Arabic do not constitute one unit, which means that there is no VP constituent in Arabic.

Having said that, we may proceed to compare Snow's account (and his claim of "simplicity") with our alternative order VSO. On the basis of such comparison, we can then decide which of the two is more preferable.

Since the two orders SVO and VSO appear in the surface syntax of Arabic, one can maintain that both hypotheses have to account for the relation of these two orders. A transformational rule of reordering could be worked out to handle such order variation. Thus, if we take the VSO hypothesis, we would need a rule which preposed the subject to the left of the verb in order to get the SVO order on the surface. Similarly, if SVO is taken, a transformational rule would also be needed, which will move the pre-verbal subject to the right of the verb in order to get the VSO surface order. Of course, this is done on the assumption that the two orders are transformationally related. Hence, since a transformational rule of reordering would be needed, whichever order we choose and account for, it seems quite plausible to conclude, on observational grounds, that neither of the two hypotheses could be preferred to the other. Clearly, then, Snow's claim that "the overall grammatical statement is simpler" does not carry weight.

Does it seem that we are at an impasse, as to whether a VSO or SVO is more preferable? Obviously not; we have seen Givón's criteria giving weight to our position. Moreover, we can assume that VSO is preferable on grounds of descriptive adequacy: the rule of reordering within this hypothesis will account for the movement of the subject to the left of the verb, i.e. sentence-initially, as Part of a General Process of Left-dislocation or Preposing of Focused Elements (to be examined thoroughly in subsequent chapters). Thus, by this rule, not only can the subject be preposed to the left of the verb, but also the object, as in (1b+1d), repeated below:

- | | | | | |
|-----|----------|--------|----------|-----|
| 39. | zeid-un | daraba | 'amr-an | SVO |
| | Zeid-nom | hit | Amr-acc | |
| 40. | 'amr-an | daraba | zeid-un | DVS |
| | Amr-acc | hit | Zeid-nom | |

Consequently, a generalisation would be captured by accounting for the appearance of the subject to the left of the verb as PART of the general process of pre-verbal movement (cf. Bakir 1979). This matches with Chomsky's statement that:

"We have a generalisation when a set of rules about distinct items (subject and object in this case) can be replaced by a single rule (or, more generally, partially identical rules) about the whole set, or when it can be shown that a "natural class" of items undergoes a certain process or set of similar processes".

(Aspects: p.42)

Further support for the VSO order comes from Snow's hypothesis itself. We have seen earlier that OVS is an admissible surface order and the object movement can be easily accounted for by a simple transformation. However, under the SVO hypothesis, we would need two transformations to get (41) from (42) below:

41. 'amr-an daraba zeid-un OVS
42. zeid-un daraba 'amr-an SVO

The first transformation will move "'amran", the object, and focus it sentence - initially: Snow's rule is formulated in (43):

43. X - NP - Y - NP - Z
1 2 3 4 5 → 1 4 + 2 3 ∅ 5

The output of this transformation is:

- * 44. 'amr-an zeid-un daraba OSV

which is ungrammatical.

Another obligatory transformation is needed to extrapose the subject "zeid-un" and place it to the right of the verb.

The second transformation needed is

$$45. \quad X \quad - \quad NP \quad - \quad V \quad - \quad Y$$

$$1 \quad 2 \quad 3 \quad 4 \quad \longrightarrow \quad 1 \quad 3 + 2 \quad \emptyset \quad 4$$

and this transformation is Obligatory since 1(X) is [+ accusative]. We may note that both (43 + 45) are optional except when (45) has applied, then it becomes obligatory.

Or, we can apply (43) first, since we need it to derive

$$46. \quad \text{daraba} \quad \text{zeid-un} \quad \text{'amr-an} \quad \text{VSO}$$

and then apply (43) on the output of (44) to derive

$$47. \quad \text{daraba} \quad \text{zeid-un} \quad \text{'amr-an} \quad \text{VSO}$$

It is interesting to note that the only function of (43) is to convert an SVO into a VSO structure. Under the VSO assumption, we can derive (41) directly from (46) by the application of the same rule that we need to derive (42), i.e. a rule that preposes constituents to the left of the verb. Needless to say that Snow's SVO hypothesis, where an obligatory rule exists, i.e. (43), contradicts with Chomsky's (1978) recent stance that all transformational rules are optional and unordered.

To recapitulate, we have discussed what the basic word order should be. This issue was considered with reference to the least-markedness criterion and VSO was taken to be the underlying order. Also, VSO was proved to be the basic word order for Arabic, with the structure $S \longrightarrow V-NP-(NP)-...$ This conclusion was arrived at by comparing such proposals as Snow's PS-rule $[S \longrightarrow NP-Pred Phr]$, i.e. SVO with our alternative

VSO. It was also shown that a VP constituent in Arabic cannot be defended, contrary to Chomsky's proposal as to the universality of this category. The VSO order gained further support from potentially ambiguous sentences in which the nouns have no case endings. It was maintained that in such ambiguous contexts, surface order is strictly VSO and NEVER VOS. This again leads us to the inevitable conclusion that the underlying word order for the Arabic sentence is VSO.

1.3.2. Is there any other evidence for the VSO order?

To regress, under 'Parts of Speech', we mentioned the Noun and ~~the verb, without~~ mentioning the 'particle'. This constituent, however, merits some discussion, particularly as it bears on the syntactic function of constituents, and probably on the word order of constituents.

Traditional grammarians call the particle 'a harf' and define it as "a word which indicates a meaning outside itself only". Some recent grammarians mistakenly and falsely assumed that by "ma'naa" (meaning) was meant the intrinsic, lexical meaning of a noun or verb, or at least the meaning of "noun-ness" and "verb-ness". In fact, when the word "ma'naa" is used, it is invariably used in conjunction with one of the function terms; for example, in Arabic grammar books we read "ma'naa al-naab" (the meaning of the accusative), "ma'naa al-?amr" (the meaning of Command), etc. This shows that ma'naa or meaning refers to grammatical meaning, hence the later term "ma'aani al-naaw" (the grammatical meanings) which we find in grammar books.

The harf, against this use of 'ma'naa', is a simple instrument for indicating a grammatical function, thus the 'problem' of its intrinsic meaning does not arise. Accordingly, we speak of prepositions, conjunctions, etc as instruments indicating grammatical functions. In fact, whatever meaning the

harf may have comes entirely from the function term which qualifies it.

In other words, the harf is not a technical term at all. Sībawaihī, for example, uses the harf in too many senses for it to have a precise technical meaning.

With the above 'background' in mind, let us consider one of these elements, everlastingly misconceived as a 'particle', namely ?inna and see whether it is a harf with a 'secondary' function, or whether it is actually a verb in its syntactic behaviour. If it is proved to be a verb, then it will be a further support for the surface structure VSO in Arabic.

Arab grammarians say that ?inna is a harf, i.e. particle, that governs two nominals and inflects the first noun or pronoun in the accusative case, thus becoming ism?inna (the noun of ?inna) and the predicate is called its xabar, i.e. predicate. Hence, they say, ?inna is a harf (particle) that 'resembles' the verb.

Ross (1970) in his article "On Declarative Sentences" maintains that ?inna is a complementiser in Arabic:

"In Arabic, there are three complementisers,:

?an, which is used after verbs like ?uriidu (I want), ?aamuru (I command), and other verbs denoting expectation, command, or request; ?inna, which is used only after the verb ?aquulu (I say); and ?anna, which is used after all other verbs ..."

It is worth noting at the start that ?inna and other similar items constituted an area of controversy between the two traditional schools of thought, the Kufis and the Basris. While both agree that ?inna is "a harf mušabbah bil-fi'l" - "a particle resembling the verb", they take different attitudes regarding the 'government' of the nominals after ?inna.

Let us illustrate with an example:

48. zeid-un mujtahid-un
 Zeid-nom clever-nom
 'Zeid (is) clever'

The above sentence is traditionally considered of the 'subject-predicate', equational, or a possible topic-comment structure. However, what is at stake here is a sentence with two nominals. Both nominals are in the nominative case, i.e. /-un/ ending. ?inna may occur at the beginning of the sentence, especially in a situation where the speaker wants to emphasise what he has said before about 'Zeid':

49. ?inna zeid-an mujtahid-un
 verily Zeid-acc clever-nom
 'Verily, Zeid (is) clever'

We notice that ?inna has operated on the first noun following it, governing it in the accusative. If it were a particle like 'other' particles, say a preposition, the noun would be inflected in the genitive:

50. ra?ay-tu muhammad-an fi s-suuq-i
 saw-I Muhammad-acc in def-market-gen
 'I saw Muhammad in the market'

or like adverbial conjunctions:

51. ?arad-tu ?an ?astariha
 wanted-I to rest
 'I wanted to rest'

where the verb '?astariha' is inflected for mood.

Without ploughing any deeper into semantic 'notions', I shall look at ?inna from a morphological as well as a syntactic point of view.

Morphologically, the verb in Arabic inflects for mood: indicative with /-u/; subjunctive with /-a/ after particles like ?an; and imperative with jussive, which can be represented by /ø/, as in the following examples:

52.(a). ?a^hhabu ?ilaa al-madrasat-i .. - indicative

(I) go to def-school-gen

'I go to school'

(b). ?raada hasan-un ?an ya^hhaba - subjunctive

wanted Hasan-nom to go

'Hasan wanted to go'

(c). ?i^hhabø bi-sur'at-in imperative

go with-speed-gen + jussive

'(you) go quickly'

(d). laa tal'abø fi š-šaari'-i imperative
+ jussive

part. play in def-street-gen

'Don't play in the street'

?inna exhibits only one mood, the perfective with /-a/ ending. It is also of the canonical form /C-CC-/, a trilateral verb like yahaba /C-C-C-/.

Furthermore, ?inna is not alone in this respect; there is a sub-class of 'defective' verbs, i.e. not fully inflected for the present or future. This sub-class includes verbs like 'asaa (wish), bi?sa (damned or cursed), habba^haa (blessed).

Syntactically, however, ?inna behaves like other transitive verbs. For example, in the sentence:

53. kataba 'aliyy-un risaalat-an

wrote Ali-nom letter-acc

'Ali wrote a letter'

the transitive verb 'kataba' governs and operates on two nominals, Ali, inflecting it in the nominative to become the agent, and risaalatan in the accusative to become the object. Similarly, in sentence (49) above ?inna operates on two nominals. However, whereas kataba operates on two 'unrelated' nominals, ?inna can be regarded as operating on constructions of the topic-comment type.

In addition, ?inna, like other transitive verbs governs pronoun clitics:

54. ?a'taa-nii zeid-un kitaab-an (indirect object)
 gave-me Zeid-nom book-acc
 'Zeid gave me a book'
55. ?inna-nii min al-?urdun-i
 verily-me from def-Jordan-gen
 'Verily, I am from Jordan'

Furthermore, ?inna operates on the 'xabar' (comment), contrary to the Kufis claim, and in accord with the Basris, exactly like the participial noun - called nominal agent:

56. zeid-un yadribu ?abuu-hu 'amr-an
 Zeid-nom hit father-his Amr-acc
 "As for Zeid, his father hits Amr"

and the nominalised form

57. zeid-un daarib-un ?abuu-hu 'amr-an
 hitting-nom
 'As for Zeid, his father is hitting Amr'

where 'amran is the object of yadrib in (56) and of daarib in (57).

To illustrate the operation of ?inna on the xabar or comment, let us consider this sentence:

58. 'aliyy-un tawiil-un
 Ali-nom tall-nom
 "Ali (is) tall"

Traditional grammarians classify the above sentence under the 'Subject-Predicate' type. Both nominals are in the nominative case, and according to the general principle of Regent and Operative, the xabar is controlled by the 'subject' or topic and with nominative case ending /-un/. These grammarians go on to say that if ?inna is inserted at the beginning of this sentence, it operates on the first nominal rendering it in the accusative case and this nominal becomes 'ism ?inna', the noun of ?inna. But they do not account for the xabar in terms of inflection.

However, in our analysis, we could say that ?inna, being verbal, operates on both 'nouns', picking out the first noun as the theme or topic of the message - and proceeding to make a comment or pronounce a xabar or predication about this topic. Since "Ali" is picked out as the topic, i.e. something like "I choose Ali, thus rendering it in the accusative as a result of my choice", the rest of the construction provides the comment or predication. Thus,

- 58.a. ?inna 'aliyyan tawiilun

is made up of two chunks, a small sentence ?inna 'aliyyan and another chunk tawiilun. This offers a better explanation since the predicate can be nominal or sentential:

- 58.b. ?inna 'aliyyan yaktubu risaalatan

which can be 'paraphrased' as: I am going to speak of Ali: he is writing a letter.

Let us consider another structure of the topic-comment type, where a prepositional phrase is 'freed' from its participial nominal and fronted to intervene between ?inna and the following structure:

59.(a). zeid-un ma?xuux-un bi-ka

Zeid-nom fascinated-nom by you

(b). bi-ka zeid-un ma?xuux-un

(c). ?inna bi-ka zeid-un ma?xuux-un

verily by-you Zeid-nom fascinated-nom

'Verily, Zeid is fascinated by you'

In (59c) there is no object for ?inna to govern and operate on: does 'it mean that our argument for ?inna as a verb has collapsed? Definitely not, for the very simple reason that we cannot have a 'particle' preceding a preposition like to-from, on the one hand; and what are we 'emphasising' then?

In fact, ?inna is still functioning on a pronoun which is deleted and the semantic interpretation of which can be recoverable from 'Zeid'. This is to say that the underlying structure of (59c) is 60, where ?inna-hu actually occurs:

60. ?inna-hu bi-ka zeid-un ma?xuux-un
?inna-haa bi-ka hind-un ma?xuuxat-un (f.)

This is an interesting situation, similar to the topic-comment structure, where the 'subject' which is coreferential with the topic is deleted. In other words, the pronoun deletion in the above example is part of a general process of subject pronoun deletion.

Returning to Ross's unwarranted claim that ?inna is a complementiser, let us first consider some examples:

61. ?araada samiir-un ?an yaqra?a al-jariidat-a
wanted Samir-nom to read def-newspaper-acc
'Samir wanted to read the newspaper'

What emerges from the preceding discussion is that ?inna behaves in some syntactic and morphological respects like a verb, though it is not a nuclear member of the class of verbs. But it is even more clearly not a preposition or a complementiser. There is a problem of classification which our VSO analysis can handle if ?inna is entered in the lexicon as a verb.

CHAPTER II

2. Syntactic Processes and Pragmatic Functions in the Arabic Sentence

2.1. Preview

In Chapter I, we defined the sentence as an abstract grammatical unit, postulated so as to account for the dependencies between units of syntactic structures. We also defended a basic VSO word order for the Arabic sentence.

In this chapter, we will be looking at the interaction of constituents in the Arabic sentence. We will specifically investigate two points: a) the various syntactic processes involved in the various arrangements of constituents in the sentence: b) the pragmatic functions (definition p.50) of the various structures.

At the outset, it is worth noting some general remarks to put the ensuing discussion into clear perspective.

Chomsky (1957) argues that

"(the) investigation of such (semantic) proposals invariably leads to the conclusion that only a purely formal basis can provide a firm and productive foundation for the construction of grammatical theory".

(Syntactic Structures: p. 100)

It is not my purpose here to give a historical account of the development of the linguistic theory since Syntactic Structures; this can be easily found in any of the numerous compilations on the subject. However, it is enlightening to recall part of the controversy amongst linguists over syntax and semantics in general.

Syntax to Chomsky is the core of linguistic theory. Brought up in the structural tradition of Zellig Harris, the linguist, and Nelson

Goodman, the philosopher, Chomsky revolted against that school and conceived of linguistic theory as ^{focusing on the core} ~~as~~, namely to describe syntax. In fact, many of Chomsky's ideas on syntax come from Harris, and the fundamental ideas of generative phonology are applied by Bloomfield and Hockett. However, Chomsky's perception is that syntax, the core of linguistic theory, should specify the grammatical rules underlying the construction of sentences (cf. Syntactic Structures), and at a later, more ambitious, stage explain all of the linguistic relationships between the sound system and the meaning system of the language (cf. Aspects). But despite his revolution against structuralism, Chomsky inherits and maintains from his structural upbringing the conviction that syntax can and should be studied independently of semantics; that FORM is to be characterised independently of meaning. This is what the afore-mentioned quotation is about. Moreover, it is interesting to note that while structuralists feared the intrusion of semantics into syntax, because meaning seemed "too vaporous and unscientific a notion for use in a rigorous science of language" (Searle, 1972), part of this apprehension can be seen in Chomsky's persistent preference (?) for syntactical over semantic explanations of linguistic phenomena.

With the above brief background in mind, I take the first step in discussion, taking up pragmatic functions first and defining our terminology.

The subject of Pragmatic Functions such as theme/rheme, topic/comment, and the distinction between, say, subjects and topics (as well as between predicates and comments) is an 'old' one, going back to Plato and Aristotle. The original theme/rheme distinction has been elaborated by a number of 20th century linguists. Jespersen (1929), for example, distinguishes between subjects and topics in his Philosophy of Grammar: he distinguishes grammatical, logical and psychological subjects. 'Logical subject' is

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- - -

related to 'agent', i.e. has to do with a participant role, and 'psychological subject' is related to 'theme/topic'. Later, the notion of pragmatic functions was examined by the Prague School linguists, who used the term Functional Sentence Perspective (FSP) to refer to this manner of looking at language. In their work, the Prague School linguists regarded the FSP as a matter of discourse, i.e. dealing with the level of contextual organisation as opposed to the levels of semantic and grammatical (or syntactical) organisation. The same subject has been treated by Halliday (1968) and later by a number of linguists in a volume edited by Charles N. Li (1976). Some of these linguists recently felt that the above distinction between the levels of organisation is no longer satisfactory. Kuno (1976 a,b), for example, tends to treat these three levels as non-distinct from one another, thus making the dichotomy between topics and comments as much a syntactic-semantic one as a contextual one (cf. Li, 1976).

3.2. Definitions

However, we can start by saying that pragmatic functions are those functions which "specify the informational status of the constituents involved within the wider communicative setting in which they occur" (Dik, 1978). This communicative setting comprises what the speaker and addressee know, believe, or assume to be true when producing or interpreting some linguistic expression. The full body of knowledge, beliefs and assumptions known to the Speaker and Addressee is referred to as pragmatic information. (This point will be elaborated in due course). Such information includes general, situational, or contextual information. Thus, long-term information about the world and other possible worlds is referred to as general information or knowledge; information perceived or experienced by participants within the situation in which the interaction occurs is situational information; and information resulting from context,

i.e. information exchanged before any given moment, is labelled as contextual information. But we may ask the following question at this stage: Does pragmatic function simply consist of the provision of new information? The answer seems to be a negative one: there will be pragmatic information normally shared by the speaker and addressee; there will also be, at any given moment of interaction, information only available to the speaker, and information only available to the addressee. Consequently, it is important for each participant to have a reasonable idea about which pragmatic information is shared between him and the other, and which information is not shared. This is obviously a matter of assumptions on the part of each participant. It follows that, for effective verbal interaction between any two participants, A and B, there should be a 'store' of information of the following characterisation:

a) information shared between A and B as 'estimated' by A; b) information not shared between the two as also estimated by A; c) information shared between A and B as estimated by B; d) information not shared between the two as estimated by B. It can be said then that the main function of communication is to effect changes in the pragmatic information of the other. Parallel to the functions of transformations in Transformational Grammar, changes in pragmatic functions can add or substitute information or alert the addressee to something he did not know before. Thus, when some linguistic expression provides the addressee with information he did not have before, addition takes place. Similarly, when the addressee has something in his mind, i.e. as his pragmatic information, the speaker calls his attention and 'tells' him that it is Y rather than X that is the case; hence, the speaker leads the addressee to replace his information with the required piece. It may also happen that the addressee had some piece of information, but was not thinking of it at the given moment, and the speaker alerts him to that by a certain linguistic expression.



Since pragmatic functions clearly and crucially depend on pieces of information and, in linguistic theory, play a significant role in the description of natural languages, we speak of functions like Topic/Comment; Theme/Rheme; Given/New; Focus/Presupposition, etc.

Theme, as a pragmatic function, "specifies the domain of discourse" (Dik 1978); it is 'what I choose in 'this' sentence', or still, the better definition of Halliday "the starting point of the message".

Rheme is what I say about the theme.

Given and New are not separate pragmatic notions; rather, they are notions associated with the other pragmatic functions. We mentioned above the kinds of information available to and shared by either or both participants in verbal interaction: thus Given or Known information is what the speaker assumes that the hearer already knows because (a) it is common knowledge, i.e. general information (b) it is included in the context of situation, i.e. contextual information, or (c) it has been mentioned in a previous sentence.

New information is that which the speaker supposes not known to the addressee. It is usually given a prominent slot in the sentence. We can now refine our definition of Known or Given as "What I have been talking about" and New as "What I want to talk about".

Tying up the above terms, we can say the following: while Given/New is a structure of the information unit, i.e. what the speaker considers as a unit of discourse, realised by intonation, Theme/Rheme is a structure of a clause, realised by the sequence of elements: the theme comes first. Moreover, Given is addressee-oriented and context-dependent, whereas Theme is speaker-oriented and context-free (cf. Halliday, 1970). Thus the connection and interplay between Theme and Known, Rheme and New is obvious.



Focus, as a pragmatic function, is also relevant in this network of information: it refers to that part of the sentence which is highlighted in some way because it carries the point of the sentence. In English speech, for example, the Focus is marked by the tonic stress which is placed on the last content word of the structure which is being focused. This point and other points mentioned so far will be investigated further in subsequent sections.

We referred to assumptions, or presuppositions, in connection with information available to participants. The notion of presupposition is a very important pragmatic notion, but it is not considered as a pragmatic function within the sentence, so that it can be assigned to any part of the sentence, like other pragmatic functions. Let us elaborate further on this point.

On the level of information, presupposition can be defined in terms of a relation between the uttering of a sentence and the context in which it is uttered. The utterance of a sentence refers to "an actual act of speaking" (Keenan: p.49). This is to say that the act of speaking is a spatio-temporal event. The context of an utterance includes the participants involved in the speech act. In other words, the context in which a sentence is uttered will typically consist of at least two participants, the speaker and the addressee. It may also include other participants or the audience. It should also include the "cultural environment" of the utterance; for example, whether the speech act is "part of a ceremonial ritual, sermon, or a certain transaction" (Ibid). Put differently, the context is the "wider communicative setting" (Dik: p.128) in which the informational status of the constituents is specified. Thus, in order for a sentence to be literally meaningful, i.e. to include the intended meaning, these conditions - which are called presuppositions or assumptions - must be satisfied; otherwise, the act 'misfires', which means either the sentence

is not understood or it means something else, e.g. a joke, an insult, or any other kind of figurative meaning. The conditions to be met will thus include a wide range of relations, like the relation and status between participants, e.g. age, sex, presence or absence of certain objects in the physical setting of the utterance, and location of participants. Once these conditions are met, we can speak of the appropriateness of an utterance in context. Thus the utterance of a sentence pragmatically presupposes that its context is appropriate.

To recapitulate, we can say that presuppositions or assumptions are not to be found in linguistic expressions at all; they may be associated with linguistic expressions by means of some general pragmatic considerations like the following: a) when a speaker assumes that X is true, he may express Y; b) when a speaker expresses Y, he must assume that X is true; and c) when an addressee hears a speaker express Y, he may infer that the speaker assumes that X is true. The assumption here that X is true is the presupposition, and Y is a linguistic expression. (cf Dik 1978). It is obvious then that presuppositions fall outside the linguistic expressions which they are presuppositions of.

The above general exposition of pragmatic functions as realised through syntactic processes is commonly agreed upon by linguists. Differences, however, start to appear when these linguists use these terms in different ways to suit their purposes, the result of which is confusion in terminology. For example, left-dislocation is labelled as topicalisation, or focussing, or left-dislocation and clefting, or fronting. However, if we manage to establish a general consensus regarding right and left dislocation, as the filling of structural positions in the sentence we can then investigate the occurrence of unusual or marked orders of constituents: with respect to Arabic, this means any deviation from the unmarked VSO pattern. By unmarked, here, is meant a sentence that is *neutral, whereas a*

marked sentence has "some particular stylistic or communicative effect" (Brown & Miller, 1980).

We may raise the following question at this stage: Does it mean that, as a general principle, each pragmatic function should effect a binary division, for example, theme/rheme, or topic/comment, etc., of the linguistic expression such that, if we assign some pragmatic function P_i to some constituent of a linguistic expression, the whole rest of the linguistic expression should necessarily have some pragmatic function P_j ?

Dik (1978), in an attempt to answer the above question, maintains that the assignment of pragmatic functions 'operates' on the 'output' of the assignment of syntactic functions, which, in turn, forms the 'input' to pragmatic functions. It seems to me that Dik's argument looks something like whether it is the matter of attaching the bell to a dangerous cat, or attaching a dangerous cat to the bell, and it does not matter which way we start since both are needed. However, let us heed to what Dik has to say.

In this theory of Functional Grammar, Dik distinguishes between functional relations at three different levels:

- (1) semantic functions: Agent, Goal, Recipient, etc.
- (2) syntactic functions: Subject and Object.
- (3) pragmatic functions: Theme and Tail, Topic and Focus.

He goes on to characterise each of the above levels: thus semantic functions specify the roles which the referents of the terms involved play within the state of affairs designated by the predication in which they occur. Syntactic functions specify the perspective from which that state of affairs is presented in the linguistic expression. And pragmatic functions specify the informational status of the constituents within the wider communicative setting in which they occur.

Dik goes on to distinguish also between a 'nuclear' and a 'non-nuclear' construction; the nuclear is the Predication, the main block of the sentence, and the non-nuclear includes other 'optional' additions. Thus, topic and focus belong to the Predication while theme and tail are optional, as in the following representation:

(X₁) Theme , Predication, (X_j) Tail

These additions are related to the predication by pragmatic relations. Thus Theme is the left-dislocated constituent, and Tail is the right-dislocated constituent. Notice here that 'theme' as understood by many linguists does not involve dislocation, and 'tail' seems to correspond to what other linguists, like Halliday, Quirk & Greenbaum, call 'end-focus'. Following Searle, I shall keep the term 'comment' instead of Dik's 'Predication', reserving 'predication' for the act of predicating, and Predication includes topic and focus.

Dik proceeds to define 'theme' as that constituent that "presents the domain or universe of discourse with respect to which it is relevant to pronounce the following predication". 'Tail' is that constituent which "presents, as an 'after-thought' to the predication, information meant to clarify or modify (some constituent contained in) the predication". In other words, given such a representation as:

give_v (dlx:John(x₁)) Ag Subj (d+plx₂:book(x₂) Go Obj) (ilx₃: girl(x₃)_{Rec})
Action
(dIx₄:library(x₄)_{Loc})

d: term operator 'definite'

l: term operator 'singular'

x: term operator 'variable'

i: term operator 'indefinite'

etc.

and possibly extended by the afore-mentioned schema, the result will form the input to pragmatic function assignment.

(Dik: p.127)

The above structure, according to Dik, can be expressed by a sentence such as:

- (1) John gave this book to a girl in the library

It can also be expressed by the following sentences, where stress gives the different interpretations, (stressed word is underlined):

- (2) a. John gave this book to a girl in the library
b. John gave this book to a girl in the library
c. John gave this book to a girl in the library
d. John gave this book to a girl in the library

Or by left-dislocation:

- (3) a. This old book John gave to a girl in the library
b. In the library John gave this old book to a girl

Or by right-dislocation:

- (4) a. John gave it to a girl, this old book
b. This old book, John gave it to a girl in the library.

It seems to me that Dik's presentation and terminology is 'messy'; 'theme', for example, does not include left-dislocation, and left-dislocation can be taken as covering more than one function. With respect to English, thematisation (cf. Brown and Miller, op. cit.: 362-75) can prepose an NP subject, promote to subject position with the consequent changes in the verb, e.g. passive form or the introduction of a pro-verb, produce left movement rules, or result in clefting. MWA has constructions corresponding functionally to the thematisation process in English: cf. (5) - (12) - the English examples are from Brown & Miller.

Verb-Attraction (corresponds to NP Subject Preposing in English)

- (5) a. faada ad-dam'u min 'aynay-hi
 flowed def-tear from eyes(d.)-his
 "Tears flowed from his eyes"
- b. faadat 'aynaa-hy bi d-dam'i
 flowed eyes(d)-his with-def-tear
 "His eyes flowed with tears"

Promotion to Subject

- (6) a. ?a'taa-nii al-mu'allim-u al-kitaaba
 gave-me def-teacher def-book
 "The teacher gave me the book"
- b. ?u'tii-tu al-kitaab-a (min qibal al-mu'allim-i)
 was given-I def-book-acc (by def-teacher-gen)
 "I was given the book by the teacher"

"Notice that in Standard Arabic, if the passive is used, unlike English, the by-NP phrase must be omitted; otherwise, the resultant sentence is ungrammatical. However, by-NP subject phrases in the passive are well-attested in Journalese Arabic (Thalji, 1972)."

Left-Dislocation:

- (7) a. qaabal-tu muhammad-an
 met-I Muhammad-acc
 "I met Muhammad"
- b. muhammad-un qaabal-tu-hu
 Muhammad-nom met-i?him
 "Muhammad, I met him"

This construction is given further consideration in the section on Topic-Comment structure.

Clefting: (See discussion of Arabic data and Ch. IV)

- (8) a. ?anaa muula'un bi l-qisaṣ al- buulliisiyyat-i
 I fond-nom of def-stories def-detective-gen
 "I am fond of detective stories"
- b. ?inna-haa al-qisaṣ-u al-buulliisiyyat-u allatii
 verbal Part.-it def-stories-nom def-detective-nom
 ?anaa muula '-un bi-haa
 that I fond-nom of-it
 "It is detective stories that I am fond of "
- c. al-qisaṣ-u al-buulliisiyyat-u hiya allatii
 def-stories-nom def-detective-nom it what
 ?anaa muula'-un bi-haa
 I fond-nom of-it
 "Detective stories is what I am fond of"
- "Also, see section on Topic-Comment structure".

Similarly, we can speak of four general types of right-dislocation.

(cf. Brown & Miller, 1980):

End-focus Selection Rules: or the obverse of subject-selection rules:

- (9) a. sa-tufiidu haa'ihī l-?islaahaatu
 will-benefit these def-reforms
 qitaa'-an kabiir-an min an-naas-i
 sector-acc big-acc of def-people-gen
 'These reforms will benefit a big sector of the
 people'
- b. sa-yastafiidu qitaa'-un kabiir-un min an-naasi-i
 will-benefit sector-nom big-nom of def-people-gen
 min haa'ihī l-?islaahaat-i
 from these def-reforms-gen
 'A big sector of people will benefit from these reforms'

Postponement Rules:

- (10) a. al-ḥuṣuul-u 'alaa minhāt-in ḥukuumiyyat-in
def-obtaining-nom of grant-gen governmental-gen
haaḍihi l-ʔayyaam ṣa'b-un
these def-days difficult-nom
'Obtaining a government-grant these days is difficult'
- b. min as-ṣa'b-i l-ḥuṣuul 'alaa minhāt-in
of def-difficult-gen def-obtaining of grant-gen
ḥukuumiyyat-in haaḍihi l-ʔayyaam-i
governmental-gen these def-days.gen
"It is difficult to obtain a government-grant these
days"

Right Movement Rules:

- (11) a. raja'a muḥammad-un min al-madrasat-i
returned Muhammad-nom from def-school-gen
'Muhammad returned from school'
- b. raja'a min al-madrasat-i muḥammad-un
returned from def-school-gen Muhammad-nom
'Muhammad returned from school'

Pseudo-cleft Sentences:

- (12) a. kataba muḥammad-un ar-risaalat-a
wrote Muhammad-nom def-letter-acc
'Muhammad wrote the letter'
- b. muḥammad-un huwa allaḍi kataba r-risaalat-a
Muhammad-nom he who wrote def-letter-acc
"Muhammad is the one who wrote the letter"

- b. ?ilaa s-suuqi yahaba muhammad-un PP V S
to def-market-gen went Muhammad-nom
- c. yahaba ?ilaa s-suuqi muhammad-un V PP S
went to def-market-gen Muhammad-nom
- (15) a. raja'a al-jaysu muntasir-an V S Part-Comp
returned def-army-nom victorious-acc
"The army returned victorious".
- b. muntasir-an raja'a al-jays-u Part-Comp V S
victorious-acc returned def-army-nom
- c. raja'a muntasir-an al-jays-u V Part-Comp S
returned victorious-acc def-army-nom
- (16) a. yasiihu ad-diik-u sabaah-an V S Adv
crow def-cock-nom morning-acc
"The cock crows in the morning"
- b. sabaah-an yasiihu ad-diik-u Adv V S
morning-acc crow def-cock-nom
- c. yasiihu sabaah-an ad-diik-u V Adv S
crow morning-acc def-cock-nom

In sentence (13), the object NP 'qamhan' can show up in three places:

a) in its 'original' place to the right of the subject, b) before the verb, i.e. to the left of the verb, and c) immediately to the right of the verb, between the verb and the subject, as in (1a), (1b) (1c), respectively. The object can also appear to the left of the subject which can be preposed to the left of the verb. But the appearance of the object in this fourth position leaves behind a pronominal copy, and this NP is usually definite and takes the nominative case. This structure is crucially

different from these structures under discussion (see Topic-Comment):

(13) d. al-qamh-u zeid-un baa'a-hu

def-wheat-nom Zeid-nom sold-it

"The wheat, Zeid sold it".

Thus, taking the verb as the point of departure, and assuming the 'original' position of the object to be to the right of the verb, i.e. after the subject, we can see that this object can show up immediately to the right or left of the verb. Other categories can appear in such places as well, as in the other examples. To characterise our statement, we say that structurally, there are two positions or slots to which the object NP or any other category can move, one immediately before the verb and one immediately after the verb. This statement gains support from other functional or pragmatic considerations.

As mentioned earlier, Focus is one of the pragmatic considerations that contribute crucially to such positional variation in the Arabic sentence. Smith & Wilson (1979) define 'focus' as the pragmatic function that highlights a certain structure in some way because it carries the point of the sentence. It is the surface structure constituent chosen for emphasis by placement of heavy stress. Put differently, it is one of the surface structure constituents which contains the most heavily stressed item. We adopt Halliday's (1976c) definition of focus; Within each information unit i.e. what the speaker chooses to encode as a unit of discourse - the speaker usually selects one point of information focus. There appears to be a 'focal-scale', according to Smith & Wilson (1979, p. 163) along which any constituent can be chosen and focussed, depending on the assignment of stress patterns. Such stress patterns affect the basic semantic structure of a sentence and provide for its different possible interpretations. *Another way of focussing an*

element in the sentence is to place this element in Initial position, more precisely, to the left of the verb in the Arabic sentence. In Sentences (13a - 16a) the constituents "qamhan, ?ila s-suuqi, muntasiran, and sabaahan" are focussed. They provide "what is relatively the most important or salient information in the given setting "(Dik 1978, p. 19) and are answers to questions, i.e. focussed elements that provide information requested by the question. Thus, the (b) sentences in (13-16) can be considered as the most natural answers to the following questions:

- (13) b'. maa^haa baa'a zeid-un
 what sold Zeid-nom
 "What did Zeil sell?"
- (14) b'. ?yana yahaba muhammad-un
 where went Muhammad-nom
 "Where did Muhammad go?"
- (15) b'. kayfa raja'a al-jays^h-u
 how returned def-army-nom
 "How did the army return?"
- (16) b'. mataa yasiihu ad-diik-u
 when crows def-cock-nom
 "When does the cock crow?"

On the other hand, the (c) sentences exhibit a function quite different from that of the (a) sentences. In other words, the constituents "qamhan, ?ila s-suuqi, muntasiran, and sabaahan" serve a specific pragmatic function, namely that of Contrast. Thus, sentence (1.c) can be an appropriate response to the following statement:

- (13) c'. /

- (13) c'. baa'a zeid-un fuul-an
 sold Zeid-nom beans-acc
 "Zeid sold beans".

Put differently, the (c) sentence emphasizes that it is 'wheat', not 'beans', that 'Zeid sold'.

Sentence (14.c) stresses that the location direction 'Muhammad went' is not, say, "to the cinema", but "to the market". By the same token, Sentence (15.c) emphasises the 'haal' (condition) of the army, namely that it returned with victory, not defeat, and can be an appropriate response to a statement like:

- (15) c'. raja'a al-jayš-u mahzuum-an
 returned def-army-nom defeated-acc
 "The army returned with defeat".

Similarly, Sentence (16.c) can be a response to such a statement as:

- (16) c'. yasiihu ad-diik-u masaa?-an
 crow def-cock-nom evening-acc
 "The cock crows in the evening".

Thus, Focus as a pragmatic function can be indicated by one of two ways: stress-assignment to any constituent in the sentence with neutral stress, i.e. by picking out a referent to a particular constituent, or by positional placement of the constituent in sentence-initial position, i.e. to the left of the verb. In fact, Given seems to be the appropriate label for the placement of constituents in sentence - initial position, because that placement relates to the question being answered. This is to say that functionally, constituents appearing to the left of the verb serve a pragmatic function of 'focus' different from constituents appearing to the

'right' of the verb-between the verb and the subject - which carry contrasting messages. In other words, we can have a sentence like

- (13) e. al-jayš-u raja'a muntasiran
 def-army-nom returned victorious-acc

with 'al-jayš-u' preposed before the verb but not focussed, and 'muntasiran' to the right of the verb and focussed. We can imagine a situation where the addressee contradicts the speaker about the condition of the army, thus emphasising its victory, while assuming that 'al-jayš-u', the army, is the already known or given information in a previous context.

We may raise the question of whether there are two distinct syntactic processes of displacement, or whether they are merely two aspects of one and the same process. In other words, does the appearance of the focussed element, to the left or right of the verb (with the verb-initial sentence as the point of departure) result from a single general rule of displacement? Or are there two different processes of displacement, one pre-verbal and the other post-verbal? It is worth noting here that 'post-verbal' or 'right-dislocation' means moving a constituent to a position immediately to the right of the verb, even though this constituent itself moves to the left to reach the position. The term "Verb-attraction" will be used to describe this movement.

In a linear arrangement of constituents, the inevitable answer to the above question is that they are two different processes because the constituent is moved to different positions. We have already accounted for the existence of these processes on functional grounds. One thing that emerges from our discussion is that these pragmatic functions are independent of structure. In other words, the structural slot of a certain constituent does not determine the shape of that linguistic expression. (See Chapter II for further discussion). For example, a constituent NP following the verb

can still be focussed, particularly in question-answer pairs. In questions, the constituent that the question bears upon is in focus: in answers, the constituent that provides the requested information is in focus. Thus, the underlined constituents in the following sentences have focus function:

- (17) kayfa raja'a al-jayš-u?
 how returned def-army-nom
- (18) raja'a al-jayš-u muntasiran
 returned def-army-nom victorious
 "The army returned with victory"

I would go so far as to say that even if a sentence does not show any displacement of constituents, it does not mean that such a sentence will not have a constituent under focus or contrastive stress. We have seen some cases where a unique interpretation for such sentences is not available. Moreover, languages have different ways of indicating such pragmatic functions. It was also shown that stress-assignment (in the English examples), without any change or sign of constituent displacement, renders different semantic interpretations. Here is another example from Arabic, where a sentence like

- (19) katab-tu risaalat-an
 wrote-I letter-acc
 "I wrote a letter"

in which 'risaalatan' is not displaced, will still have a constituent under focus, because the noun carries stress. The above sentence is a response to the question

- (20) hal katab-ta qasīdat-an?
 Q-word wrote-you poem-acc
 "Did you write a poem?"

What I am trying to say is that the availability of a structural position or slot is independent of pragmatic motivations, and pragmatic functions depend on context. This means that typically a given constituent can have either Given or New function, depending on the context in which it is used. Thus, in an expression like Sentence (13) repeated below

(13) baa'a zeidun qamhan

both zeidun and qamhan can each be either Given or New, depending on context.

a. man baa'a qamhan ? baa'a zeidun (new) qamhan (Given)
 who sold wheat
 "Who sold wheat?"

b. maa aa baa'a zeidun? baa'a zeidun (Given) qamhan (New)
 what sold Zeid
 "What did Zeid sell?"

In addition to these functional considerations, if we find further support for the distinction between these processes of movement, we will be in a better position and will have a stronger claim regarding these different processes.

It was established earlier that the two processes of displacement serve different functions. In other words, left-dislocation is to be distinguished from verb-attraction, on functional grounds, rather than be considered as successive steps in one-and-the-same process of displacement. Let us look for other support for our claim, which could be structurally-grounded. The assumption made here is that displacement to the position immediately to the right of the verb must be singled out from other processes of movement for two main reasons: (1) It crucially involves

the existence of a special slot into which other constituents can move, i.e. to the right of the verb. (2) Movement to the position immediately to the right of the verb must be clearly distinguished from movement to a position to the left of the verb. The latter movement is discussed in Chapter 3, under the heading of Left-Dislocation.

Let us first assume that constituents can move freely to the left and right of the verb. This means that constituents can occur either to the right of the verb, i.e. post-verbally or to its left. More correctly, if we can prove that two constituents of the same category can fill the two available slots, and if the output is an acceptable sentence, then we can safely maintain that the two processes of displacement are distinct. In fact, there are sentences in Arabic that can fulfil this requirement, the acceptability of which varies along the acceptability scale.

(21) ? fi l-masjidi qaabala zeid-an 'amrun
 PP V O S
 in def-mosque-gen met Zeid-acc Am-nom
 "Amr met Zeid in the mosque"

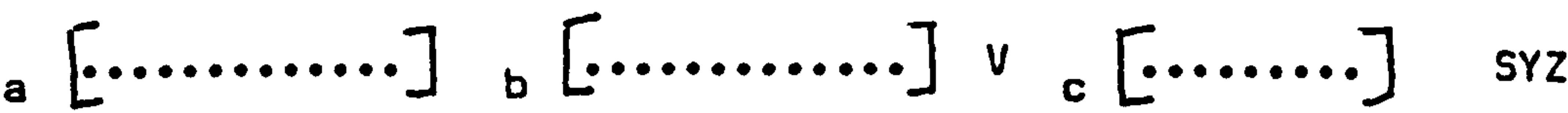
(22) ? ġadan sa-ya?tii zaa?iran xaalid-un
 Adv V Part-Comp S
 tomorrow will-come visiting Khalid-nom
 "Tomorrow, Khalid will come visiting"

(23) fi s-sayfi yazuuru l-?urdunna 'adadun kabiirun
 min as-suwwaahi
 PP V O S - NP
 in def-summer visit the-Jordan number big of def-
 tourists

"In summer, a big number of tourists visit Jordan"

However, one or two constituents can show up to the left of the verb.

In other words, two slots, rather than one, may be available to the left of the verb into which constituents move, as in the following configuration:



This means that two positions (a) and (b) to the left of the verb in the Arabic sentence are available for a constituent to move into, say, to position (b). In fact two things must be established at this stage:

- a. that the two positions (a+b) are available to the left of the verb, in order to see which syntactic categories can move into either of them; or whether these categories differ with respect to which category occupies which position (also see Chapter I);
- b. if a particular category moves to a particular position, i.e. preposed to it, then we need to see whether two constituents of the same category can occur at both positions in (a) or (b) and (c) at the same time.

This will provide evidence for a given position to the left of the verb to which certain categories can be preposed, even if other categories may exhibit more freedom in the position they take to the left of the verb. It will also provide evidence for position (c) to the right of the verb to which constituents may be moved, which will support the assumption that these two displacements are separate, one to the left and the other, to a position immediately to the right of the verb.

Looking back at sentences (21-23), we notice that different syntactic categories are preposed to the left of the verb. They are summarised in the following form:

- (21) ' (23) ' PP V O S
- (22) ' Adv V Part-Comp S

So far, there have been no examples of two constituents of the same category co-occurring in one sentence, but such sentences do occur:

- (24) fi 6-9aaliθ 'ašar?aab al-jaarii ?uqiima fi l-mawqī'
 On def-third tenth August def-current held (pass)
 PP V PP
 ar-ra?iisii li l-jaami'ati ?ihtifaal-un kabiirun ...
 on def-site def-permanent of def-university ceremony-nom big ...
 S
 "A big ceremony was held at the permanent site of the
 University on August 13th.

- (25)? raakib-an ra?aa baakiyat-an muhammad-un hind-an
 Part-Comp V Part-Comp S O
 riding-acc saw crying-acc Muhammad-nom Hind-acc
 "Muhammad, riding, saw Hind crying".

where two participial complements of the subject and object occur, one before and one after the verb. Notice that the disambiguating factor regarding which participle goes with which noun is a semantic one: thus, 'baakiyatan' has the /t/ for feminine gender, describing 'Hind'.

Moreover, two NP's may also occupy the positions immediately before and after the verb.

- (26)? kitaab-an ?a'taa 'aliyy-an muhammad-un
 OO V IO S
 book-acc gave Ali-acc Muhammad-nom
 "Muhammad gave Ali a book"

Here the displaced constituents belong to two categories that are distributionally exclusive; this is to say that these two categories cannot occur in the same place, i.e. before the verb, and the distinction between the two processes of displacement depends on that. However, our claim about the exclusive distribution of categories will not be water-tight if we find sentences where such displaced categories appear before the verb. In fact, there are sentences that show this phenomenon:

27
(27)

fi s-saffi dars-an ?alqay-tu

pp O V-S

in def-class lesson-acc gave-I

"I gave a lesson in the classroom".

28
(28)

daahik-an zeid-an ra?ay-tu

Part-Comp O V S

laughing-acc Zeid-acc saw-I

"I, laughing, saw Zeid"

29
(29)

sabaah-an ?ilaa mataari 'amman wasala ?axii

morning-acc to airport Amman arrived my brother

Adv pp V S

"My brother arrived at Amman Airport in the morning"

(30)

al-?asada fil l-hadiiqat-i ra?ay-tu

O pp V S

the-lion-acc in def-garden-gen saw-I

"I saw the lion in the zoo".

(31)

?ilaa mataari 'amman sabaah-an wasala ?axii

pp Adv V S

to airport Amman morning-acc arrived my brother

"My brother arrived at Amman Airport in the morning"

- (32) hind-an daahik-an ra?aa 'aliyy-un
Hind-acc laughing-acc saw Ali-nom
O Part-Comp V S
'Ali, laughing, saw Hind'

The above sentences are grammatical although their acceptability may vary from one Arab to another. Unacceptability is due to ambiguity resulting from the preposing of some structures. For example, the participles daahikan in (28), daahikan in (32) may refer to the subject or object. However, this ambiguity is resolved -in the above examples -by morphological information, as in (32): hindan is feminine, the name of a female, and the participle may have the feminine marker /t/, i.e. daahikatan. Thus, the participle in (32) does not present a problem of interpretation. However, in (28), there is ambiguity as to whether daahikan refers to the object "zeidan" or the subject-the pronoun clitic /-tu/. In fact, the sentence will be even more ambiguous if there are two participles:

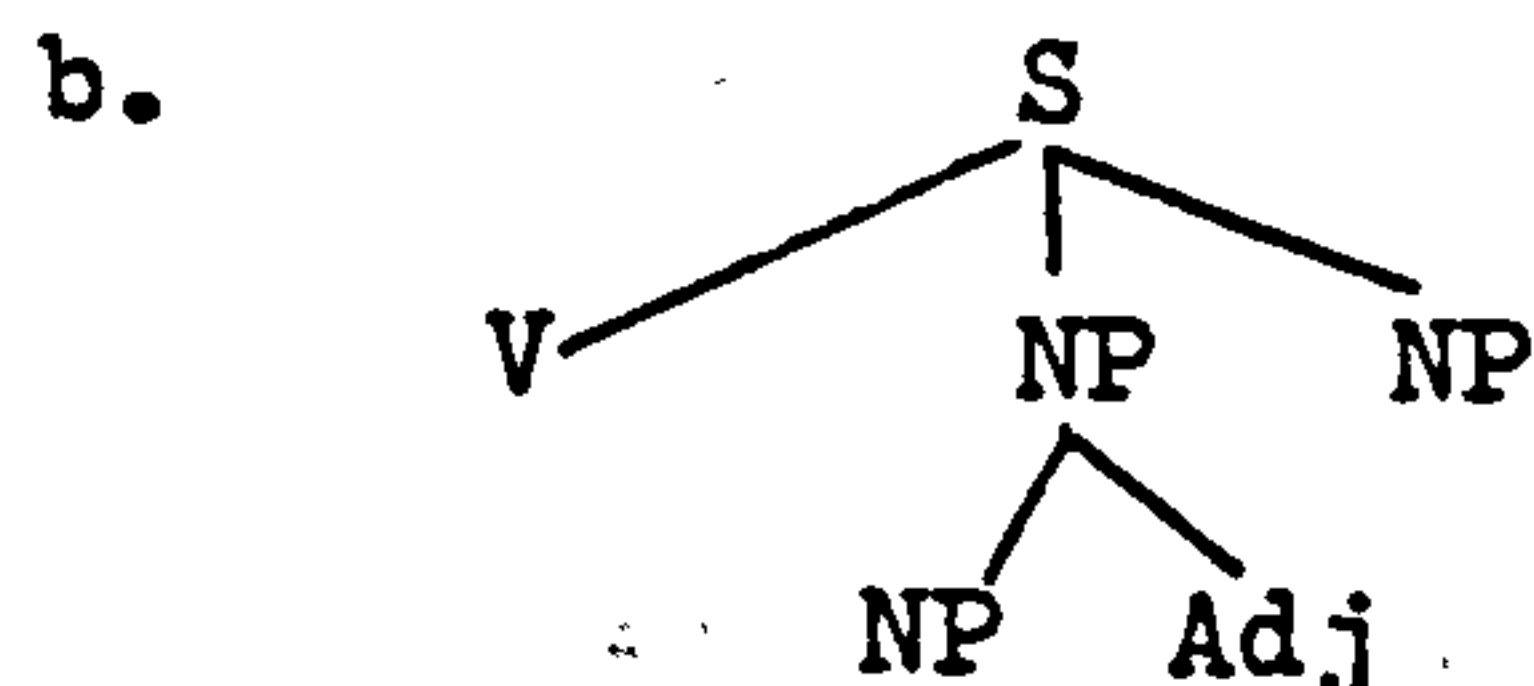
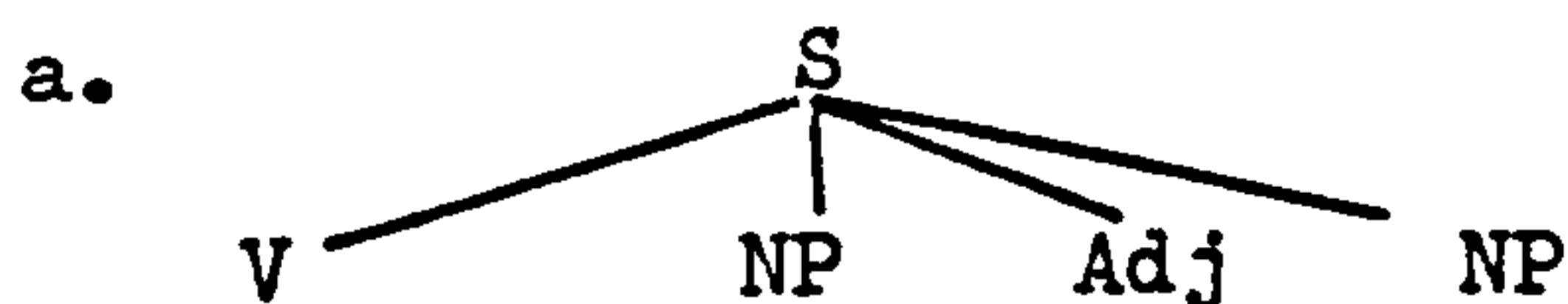
- (33) ra?aa muhammad-un zeid-an daahik-an maašiy-an
V S O Part-Comp Part-Comp

However, there is a general principle in Arabic grammar regarding this phenomenon: in case of ambiguity, the first participle goes with the nearest noun. Thus, daahikan goes with 'zeidan' and maašiy-an with the subject 'muhammadun'. Accordingly, daahikan in (28) goes with 'zeidan'.

But we may raise this question: Why is there no agreement between this adjective and the subject NP? Also, Why is it that this adjective, with accusative case affix, can be moved ?

The answer to the above question lies in the fact that the adjective daahikan is not the syntactic modifier of the subject NP, i.e. does not combine with the subject NP to form a larger NP. The structure of (32) is shown in Fig. (a) below. Compare that with the structure

of ra?aa alwaladu ad-daahiku hindan "the laughing boy saw Hind" ,with the adjective agreeing with the subject noun,in Fig.(b):



Note that in a head-modifier construction, the leftmost constituent is the head.

As maintained earlier, this free occurrence of displaced categories to the left and right of the verb weakens the assumption of displacement as two distinct processes. The reader may conclude that the displacement/ of constituents

of constituents to the right and left of the verb is FREE in the Arabic sentence. In fact, this is not the case, and the sentences above were provided as evidence for a structural position to the left of the verb, into which displaced constituents move.

As for the phenomenon of seemingly free displacement of constituents, the grammar of Arabic furnishes enough evidence to the contrary; this is to say that the movement of constituents is restricted by various structural constraints. Consider the following sentences:

(34) * marra 'inab-an 'aliyy-un haamil-an
 V O S Part-Comp
 passed grapes-acc Ali-nom carrying-acc
 "Ali passed by carrying grapes"

35
 (35) * wajada tahta š-šajarati xaalid-un jaara-hu jaalis-an
 V ADV S O Part-Comp
 found under def-tree Khalid-nom neighbour-his sitting-acc
 "Khalid found his neighbour sitting under the tree".

Both of the above sentences are asterisked as ungrammatical: this is due to the fact that objects of participles or adverbs - in the above examples - which are related to these participles, cannot move in a leftward direction to reach the position to the right of the verb. Thus it becomes necessary to have some way of representing semantic links. In fact, this phenomenon is related to a general principle in Arabic grammar. It is that of the "governor" and the "governed", or the "Regent" and "Operative". These two categories do not allow any intervening material between them. In the above sentences, the verb is the regent and the subject is the operative. The noun phrase and the adverb are related to the participle in these examples. They separate the regent from its operative, the result of which is the ungrammaticality of those sentences. However, if the regent

is a verb or a verb-like word, the operative of the regent may precede it, hence, the grammaticality of (34a) and (35a):

- | | | | | | |
|-------|---------|-------|----------|-----------|--|
| (34)a | 'inaban | marra | 'aliyyun | haamilan | |
| | O | V | S | Part-Comp | |
-
- | | | | | | | |
|-------|-------|------------|--------|----------|---------|-----------|
| (35)a | tahta | š-šajarati | wajada | xaalidun | jaarahu | jaalisan |
| | Adv | | V | S | O | Part-Comp |

By contrast, notice that the following sentences do not exhibit or require the formulation of such restrictions or constraints:

- | | | | |
|------|-------------------|--------|-----------|
| (36) | kitaab-an | qara?a | 'aliyy-un |
| | O | V | S |
| | "Ali read a book" | | |
-
- | | | | | |
|------|------------------------------|------------|-----------|-------------|
| (37) | fawqa | š-šajarati | yugarridu | al-'usfuuru |
| | Adv | | V | S |
| | "The bird sings on the tree" | | | |

where we can have (36 at 37 a), unlike (34 + 35):

- | | | | |
|-------|-------------------|----------|----------|
| (36)a | qara?a | kitaaban | 'aliyyun |
| | V | O | S |
| | "Ali read a book" | | |
-
- | | | | | |
|-------|------------------------------|-------|--------------|--------------|
| (37)a | yugarridu | fawqa | š-šajarat-i | al-'usfuur-u |
| | sings | above | def-tree-gen | def-bird-nom |
| | "The bird sings on the tree" | | | |

Another point which needs to be mentioned is that there are other structures which do not allow constituents to move to the left of the verb. This is evident in subordinate clauses that begin with a certain set of conjunctions or particles. In these clauses, the particle and the following verb are inseparable. The verb, incidentally, is usually in the imperfect

form and the subjunctive mood, yet it can occur in the perfective or indicative mood. To illustrate, the imperfect verb can be in one of three moods: the indicative with the suffix /-u/ in first person singular and plural; /-ni/ in second and third dual; and /-na/ in second singular feminine, and second and third plural masculine. The subjunctive ends with /-a/ suffix in first singular and plural, and second singular masculine. The third mood is the jussive, realized as the /-0/ or the absence of a suffix in any of the forms. The second and third perfect verb forms are of invariant forms (cf. Wright 1859):

The placement of a constituent between the particle and the verb results in ungrammatical sentences. Consider the following examples:

- (38) yuriidu l-?urdunn-u ?an yunammia[?] ?iqtisaad-a-hu
 wants def-jordan-nom to develop economy-acc-his
 "Jordan wants to develop its economy"

a * yuriidu l-?urdunn-u ?an iqtisaad-a-hu yunammia/

- (39) waqafa al-malik-u hattaa yulqia xitaab-a-hu
 stood def-king-nom so that give speech-acc-his
 "The king stood to give his speech"

a * waqafa al-malik-u hattaa xitaab-a-hu yulqia

- (40) daras-tu kay ?ajtaaza l-?imtihaan-a
 studied-I so as to pass-I def-exam-acc
 "I studied so as to pass the exam"

a * daras-tu .kay al-?imtihaana -?ajtaaz-a

What emerges from such sentences is the fact that the movement of constituents to the left of the verb is blocked when this verb is preceded by a particle in order to account for the ungrammatical sentences (38.a)

(39a) and (40.a). In other words, there is a general principle involved here: main clauses are more flexible than subordinate clauses. But this will not explain the grammaticality of (41) below:

(41) talaba al-mu'allimu ?an yaqra?a ad-darsa xaalidun
 demanded def-teacher that read def-lesson Khalid
 "The teacher demanded that Khalid read the lesson".

where "ad-darsa" has moved to the left towards the verb. But we maintained above that such movement is to be blocked when the verb is preceded by a particle. However, it seems that in a case like (41) above, we have to allow for this movement to the left of the verb and block it otherwise. (See more discussion in Chapter 111).

However, there is another alternative which does not meet the problem of accounting for some constraints on the occurrence of some constituents to the left of the verb. We can say that the constituent first moves from its original position, in a left-ward direction to get to the right of the verb. This constituent is then extracted and preposed to a position to the left of the verb, in order to get left-dislocation. In other words, the movement of a constituent from its place is a two-step process, the first to be 'right-dislocated, and the following step to be left-dislocated. This is to say that, taking Sentence (13.a) again

(13) a baa'a zeidun qamhan

we first derive

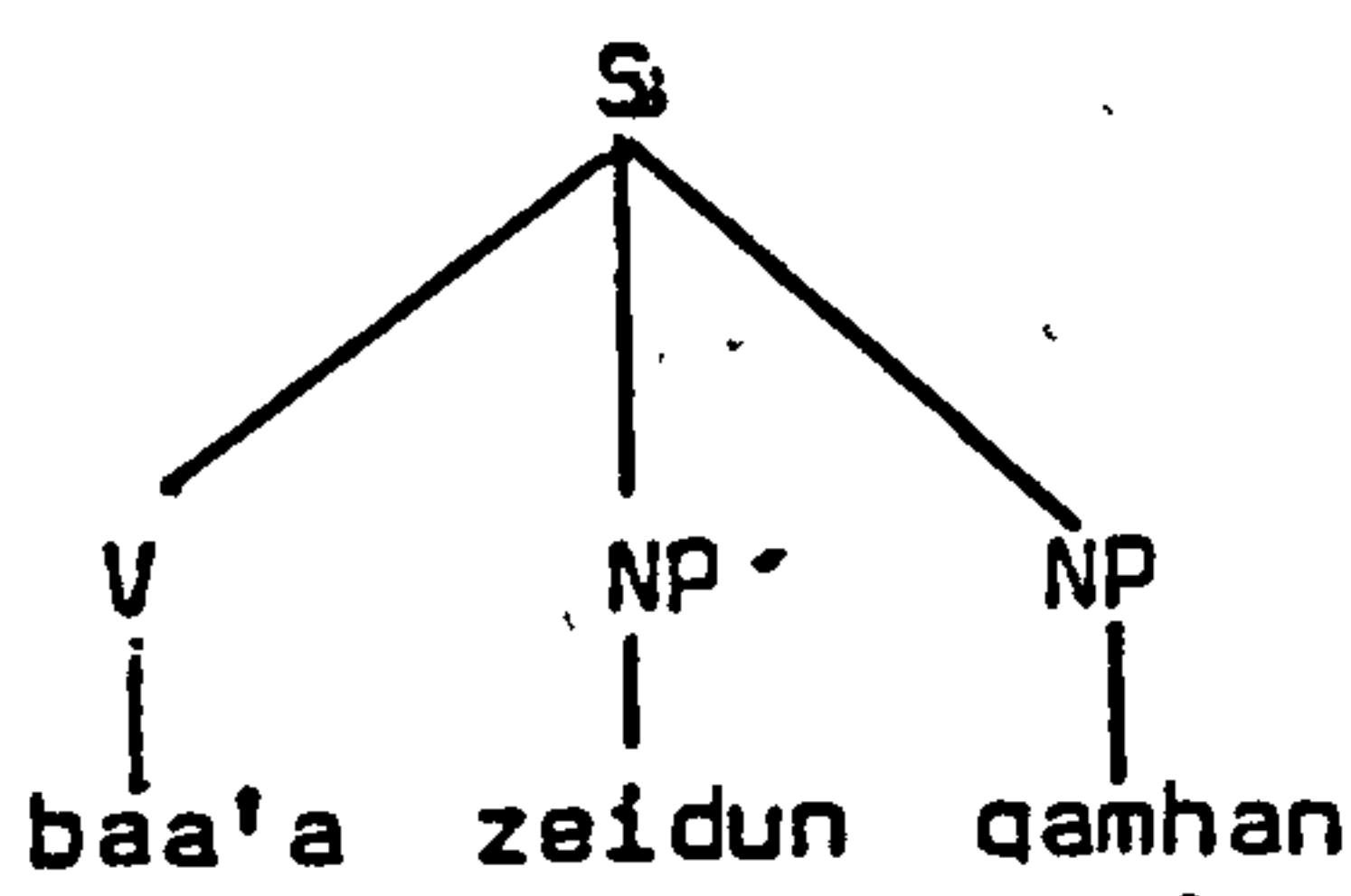
(13) c baa'a qamhan zeidun

by moving 'qamhan' to a position immediately to the right of the verb, then derive

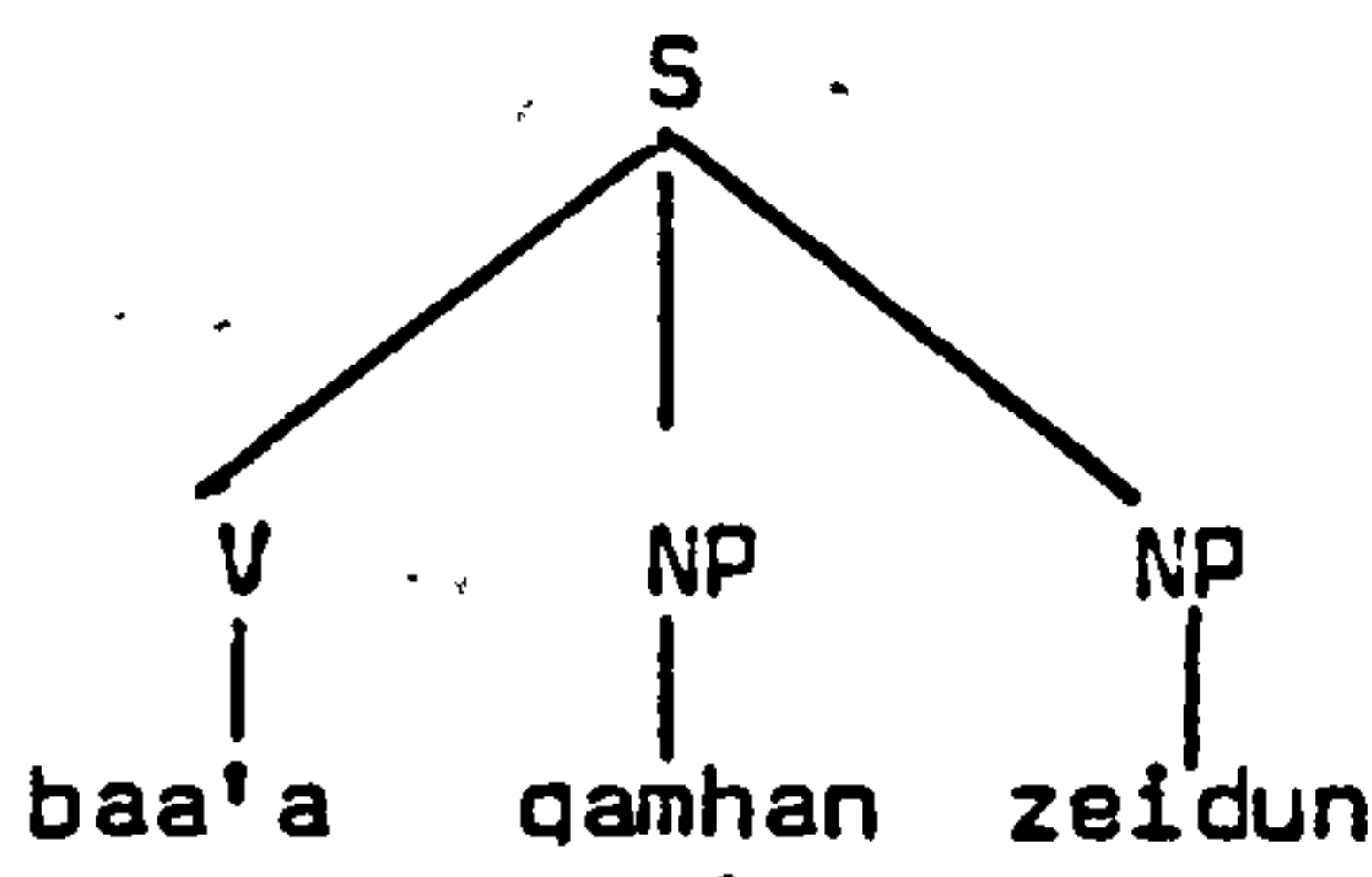
(13) b qamhan baa'a zeidun

from (13.c) by moving 'qamhan' to the left of the verb in order to get left-dislocation, as in the following diagrams:

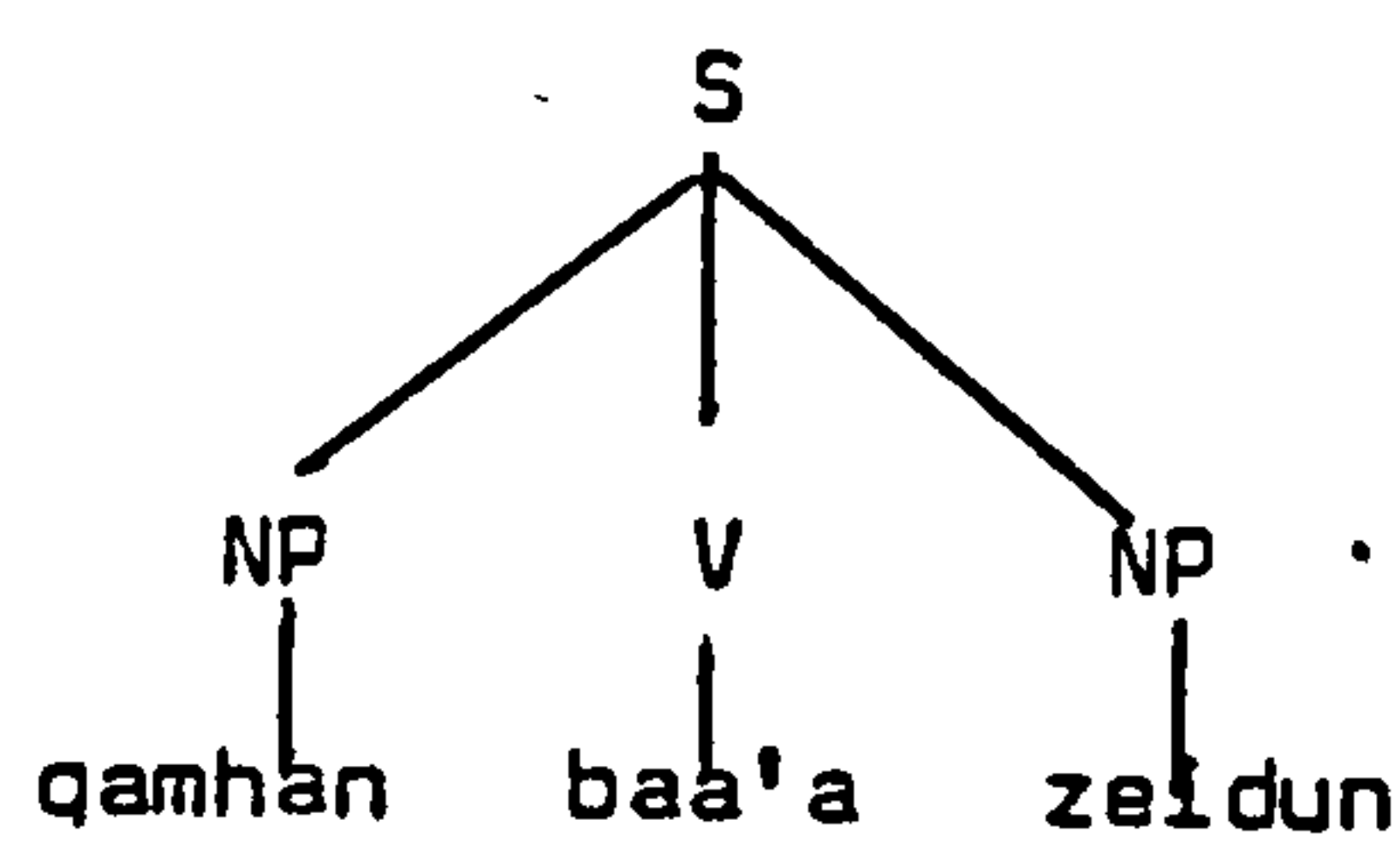
(13)a



(13)c



(13)b



Sentences (38.a), (39.a) and (40.a) are blocked by blocking the movement of the constituent in sentences when the verb is preceded by one of the particles. However, there remains the problem of blocking the derivation of (34) and (35). Under this alternative analysis, (34a) and (35.e) have to be derived from the ungrammatical (34) and (35), by moving the constituents "inaban" and "tahta š-šajarati" to a position before the verb. In order to account for the ungrammaticality of these two sentences we need to formulate the rule of constituent movement so as to block the movement of constituents that are generated within an embedded clause to a place immediately to the right of the matrix verb. But we should relax the constraints to allow for the movement of constituents to the right of the verb only in cases where we want to follow this movement with another movement to effect left-dislocation, i.e. pre-verbally.

What I have been trying to show is that treating left and right displacement as one process results in placing so many constraints on the rules of grammar, which makes it less preferable to treating left-dislocation as a different process from verb attraction. The two processes should be treated separately on functional and structural grounds.

In the following section, I take up the Verb-Attraction movement, a

process that will account for the movement of constituents backward (in a left-ward direction) in order to reach a position immediately to the right of the Verb.

2.3.2. Verb-Attraction Movement

In the previous section it was argued that different categories can show up to the right of the verb and to the left of the subject which immediately follows the verb in Deep Structure in the Arabic simple sentence. Such categories include prepositional phrases, adverbial clauses and objects. For further illustration, let us consider the following sentences:

- (42) a yuqiimu ar-ra? iis-u ma?dubata²-³asaa?-in li-⁴q-⁵duyuufi
- V S O PP ---

give def-President-nom banquet/Dinner-gen to

haa~~a~~ I- masaa?i

guests-gen this evening Adv

"The President is giving a Dinner/Banquet to the guests this evening".

- [illegible]

haaxal-masaa?i ✓

ADV

- c yuqiimu li-duyuuf-i ar-ra?iis-u ma?dubata-'asaa?-in
 V PP S O

hax'al-masaa?i

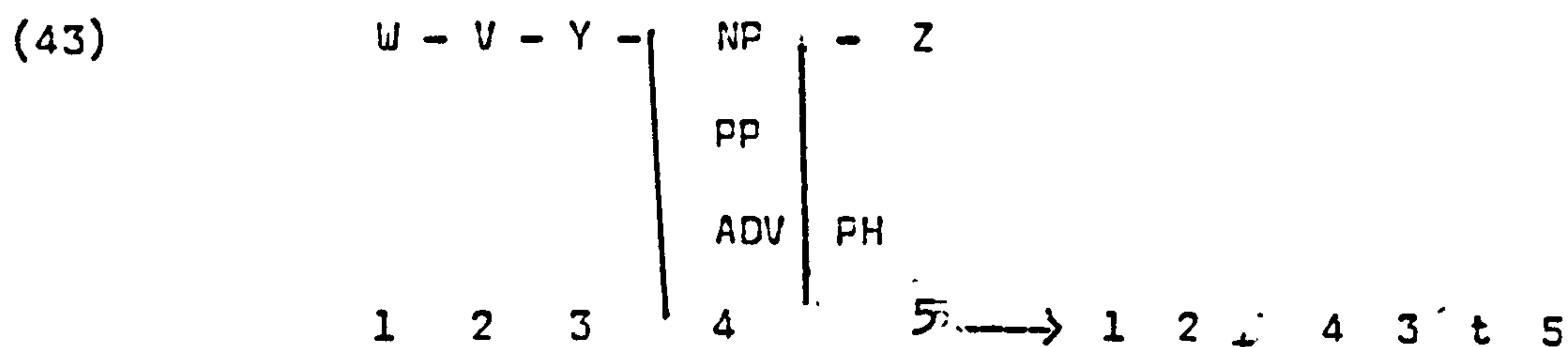
ADV

- d yuqiimu haa^aal-masaa?i ar-ra?iis-u ma?dubata-'a^saa?in
 V ADV S O

li-duyuuf-i

PP

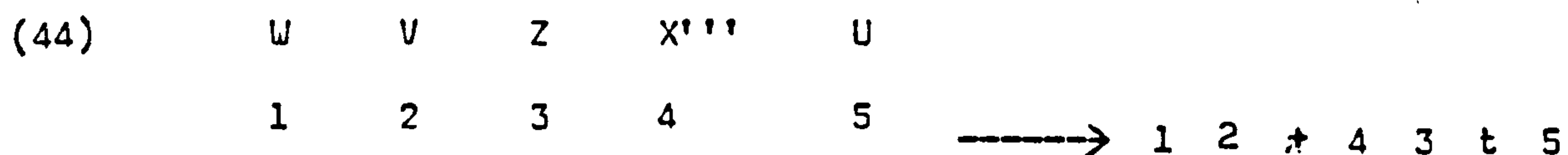
Accordingly, we can formulate an approximation of the rule which moves these categories to the right of the verb into a position between the verb and the subject:



Syntactically, there seems to be no reason why any constituent cannot be moved to the right of the verb, according to this rule, and in any order. However, pragmatically, this rule faces many problems in its present form. This is to say that the acceptability and judgement of the resulting sentences would vary amongst native speakers of Arabic.

As a common thing among these natives, a sentence with three pragmatic functions, here focuses, seems to be very much less acceptable than one where two focuses are found, which in turn is less acceptable than a sentence with only one focussed element.

As it stands, Rule (43) looks rather clumsy with the disjunction brackets, but the rule can be stated much more simply if we exploit the \bar{X} convention as in (44):



and we can generate such sentences as the following:

(45) /

- (45) a. yuqiimu haaʃaa al-masaaʔi li-duyuuf-i maʔdubata 'aʃaaʔin
 V Adv PP O

ar-raʔiis-u
 S (the-president)

give this evening to the-guests banquet dinner

- b. yuqiimu li-duyuufi maʔdubata 'aʃaaʔin haaʃaa al-masaaʔi ar-raʔiis u
 V PP O Adv S

- c. yuqiimu maʔdubata 'aʃaaʔin haaʃaa al-masaaʔi ar-raʔiisu li-duyuufi
 V O Adv S PP

- d. yuqiimu li-duyuufi haaʃaa al-masaaʔi ar-raʔiisu maʔdubata 'aʃaaʔin
 V PP Adv S O

- e. yuqiimu maʔdubata 'aʃaaʔin ar-raʔiisu li-duyuufi haaʃaa al-masaaʔi
 V O S PP Adv

- f. yuqiimu li-duyuufi maʔdubata 'aʃaaʔin ar-raʔiisu haaʃaa al-masaaʔi
 V PP O S Adv

Set out below are the various stages in the derivation of (45a-d). The rule of verb-attraction as stated in (44) has the effect of a scrambling rule and many different sequences are generated. For instance, there are sentences corresponding to lines 2+3 in the derivation of (45a):

yuqiimu maʔdubata 'aʃaaʔin ar-raʔiisu li-duyuufi haaʃaa al-masaaʔi
 V O S PP Adv

yuqiimu li-duyuufi maʔdubata 'aʃaaʔin ar-raʔiisu haaʃaa al-masaaʔi
 V PP O S Adv

It is not a straightforward matter to determine the acceptability of all these examples. For instance, my informants were willing to say that (45a-f) were grammatical but found it difficult to imagine situations in which the sentences would be appropriate. Other examples, such as those corresponding to lines 2+3 in the

derivation of (45a), are even more difficult to judge. The only way I can see to handle the data in a relatively simple way is to allow the rule of verb-attraction as stated on page (81) to apply blindly and to use surface filters to pick out the most acceptable sequences.

- (45a) V Adv PP O S : 1. V S O PP Adv
 2. V O S PP Adv
 3. V PP O S Adv
 4. V Adv PP O S

 1. V S O PP Adv
 (45b) V PP O Adv S : 2. V Adv S O PP
 3. V O Adv S PP
 4. V PP O Adv S
 (45c) V O Adv S PP : 1. V S O PP Adv
 2. V Adv S O PP
 3. V O Adv S PP
 (45d) V PP Adv S O : 1. V S O PP Adv
 2. V Adv S O PP
 3. V PP Adv S O

Rule (44) will be constrained by general constraints on transformations. This will be evident when we notice that some elements cannot be dislocated to the right of the verb. Let us consider some sentences first and then try to account for the ungrammaticality of the asterisked constructions in terms of some of these general constraints on movement.

- (46) istaqbala al-malik-u al-wafd-a az-zaa?ir-a
 V S NP [O Adj]
 received def-king-nom def-delegation-acc def-visiting-acc
 "The king received the visiting delegation"

a.* istaqbala az-zaa? ir-a al-malik-u al-wafd-a

V Adj S O

(47) qara?a muḥammad-un jariidat-a al-masaa?-i

V S NP [O NP]

read Muhammad-nom newspaper-acc def-evening-gen

"Muhammad read the evening newspaper"

a.* qara?a al-masaa?-i muḥammad-un jariidat-a

V NP S O

(48) tanaawala al-?amiir-u al-ḡadaa?-a fii l-jaami'at-i

V S O pp

had/took def-prince-nom def-lunch-acc in def-university-gen

"The prince had lunch in the university"

a.* tanaawala al-jaami'at-i al-?amiir-u al-ḡadaa?-a fii —

V NP S O Prep.

(49.) ra?at hind-un faatimat-an ḥaamilat-an ṣabr-an

V S NP [O [Part-Comp NP]]

saw Hind-nom Fatima-acc carrying-acc cactus-acc

"Hind saw Fatima carrying cactus"

a.* ra?at ṣabr-an hind-un faatimat-an ḥaamilat-an

V NP S O Part-Comp

(50) ištaraa fuʔaad-un tiin-an wa 'inab-an

V S NP [NP Conj NP]

bought Fuad-nom figs-acc and grapes-acc

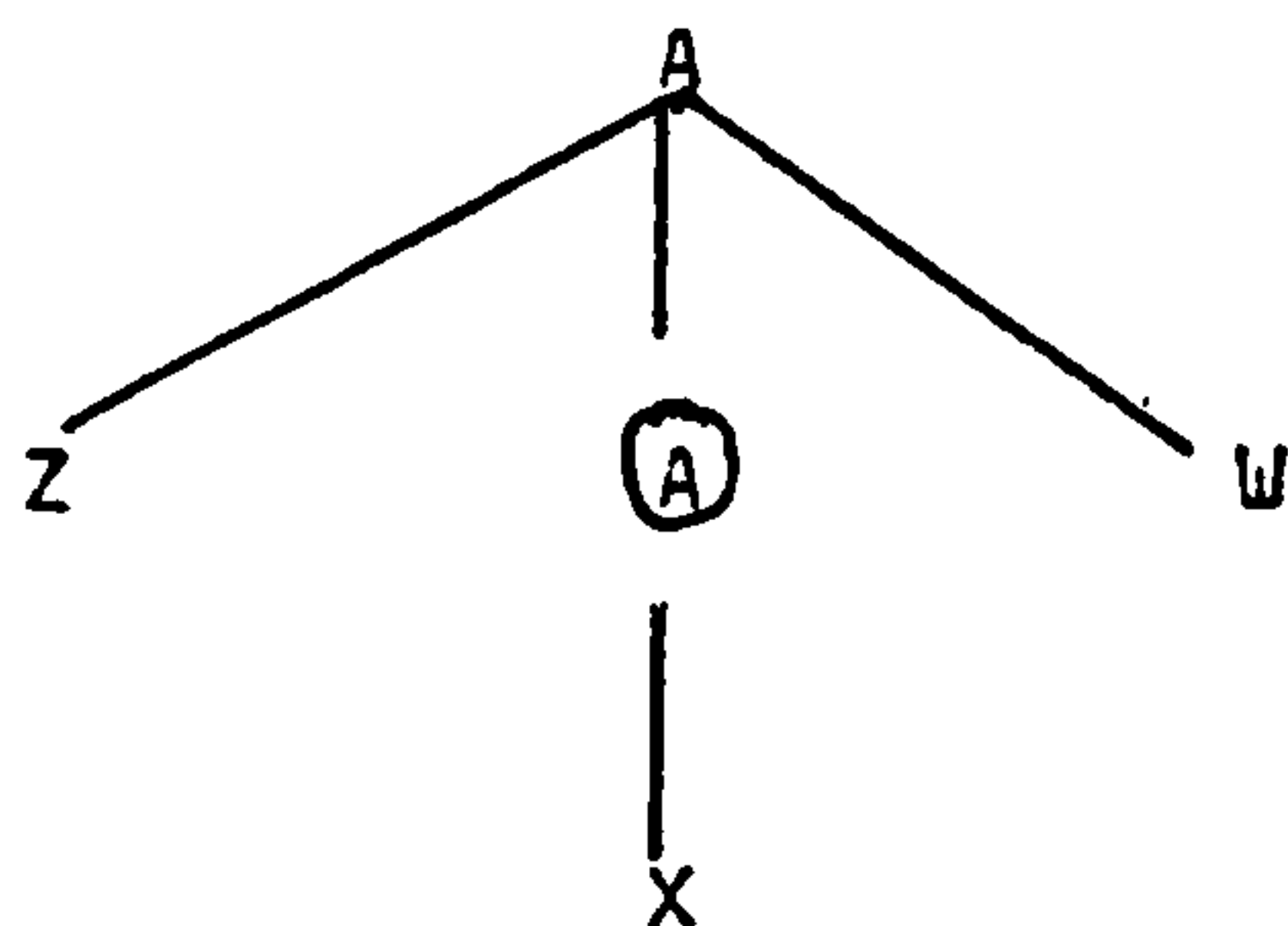
"Fuad bought figs and grapes"

a.* ištaraa tiin-an fuʔaad-un wa 'inab-an

V NP S Conj NP

Sentences (44a - 50a) are asterisked as ungrammatical because, as

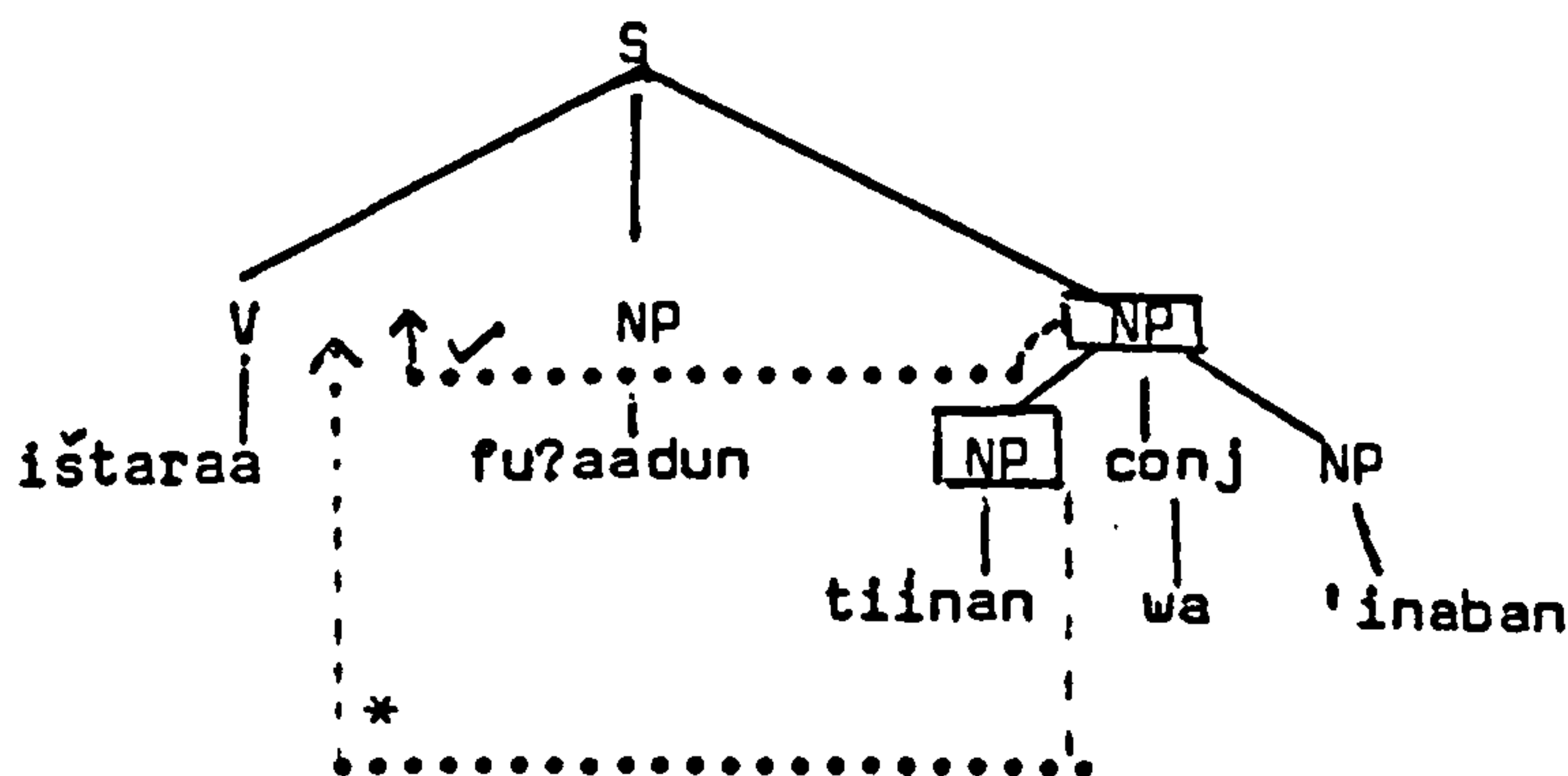
mentioned above, the movement rule (44) is subject to various constraints that will be discussed shortly. One of these constraints is the A-Over-A principle which asserts that if the phrase X of category A is embedded within a larger phrase ZXW which is also of the same type A, then no rule applying to category A applies to X (but only to ZXW). In terms of a tree diagram, the principle states that all transformations which refer to A must apply to the top-most instance of A, not the dominated A, which is circled:



The rule then will not apply to (50 a) in other words, the NP tiinan which is an X'' category (see discussion of X-bar in Chapter IV) is dominated by a higher X'' category, which is, in this case, the NP "tiinan wa 'inaban". Another way would be to employ Ross's Coordinate Structure Constraint, which can be interpreted as saying that in a co-ordinate structure either all the conjuncts are moved or none is moved. This correctly predicts the ungrammaticality of (50 a) and the grammaticality of (50b): as shown in the phrase marker (50 c).

(50) b. ištaraa tiinan wa 'inaban fu?aadun

(50) c.

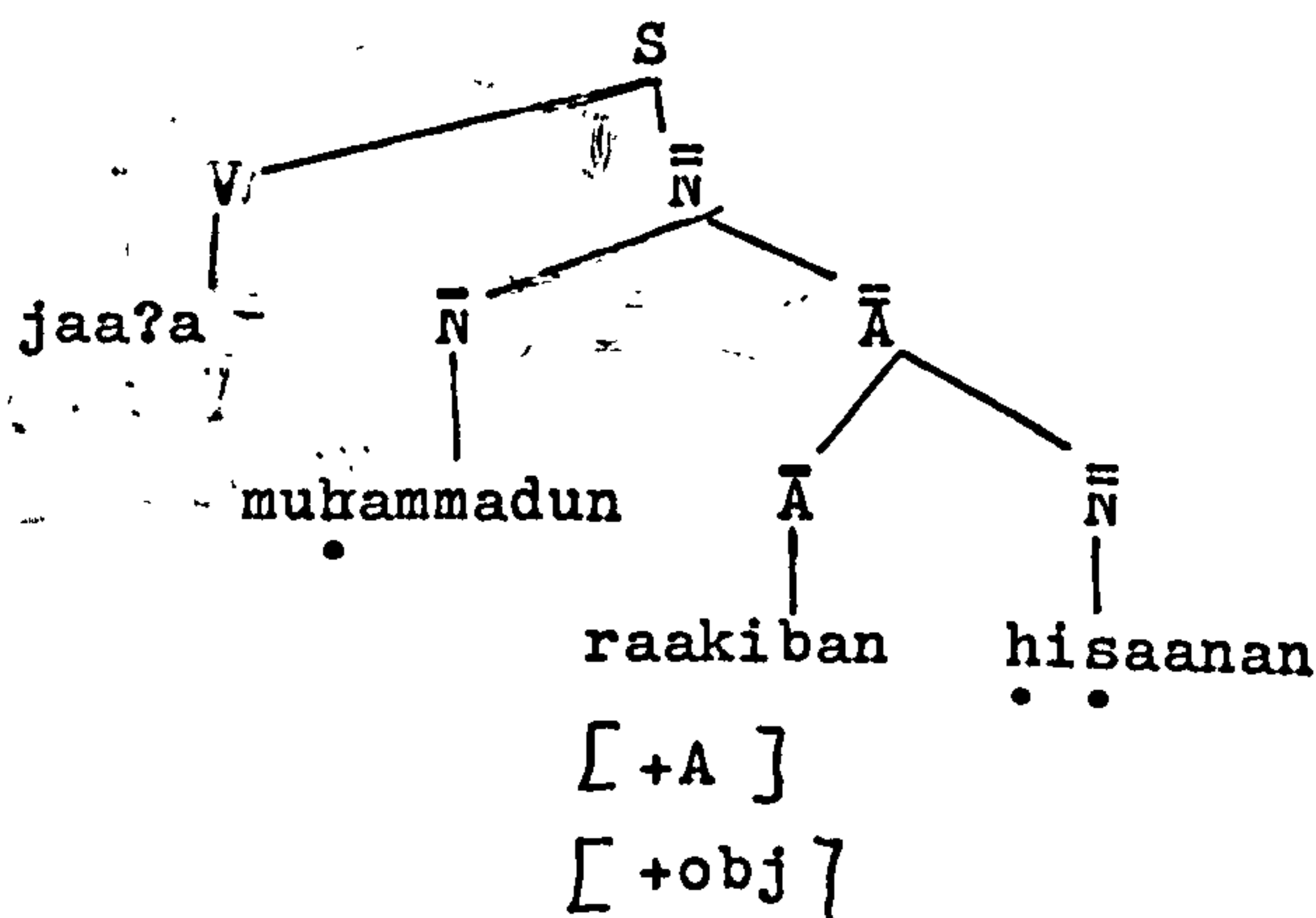


Following current views on endocentric and exocentric constructions in generative grammar, I assume that the head of a prepositional phrase is a preposition, that the head of an adjective phrase (including the traditional participle) is an adjective, and that the head of a sequence $[NP_{nom/acc} NP_{genitive}]$ is the $NP_{nom/acc}$. A general constraint, the Modifier Movement Constraint, can be stated governing the movement of constituents to the front of the sentence.

Modifier Movement Constraint (MMC)

In a head-modifier construction $\bar{X}[\bar{X} \dots Y]$, the \bar{X} is the head and Y the modifier, and where $\bar{X} = \bar{N}, A, \bar{P}$, Y cannot be moved away from \bar{X} $[-obj]$.

This constraint replaces the A-over-A Constraint, because the latter does not apply to (46a) and (48a), where A is moved out of a larger constituent B but A and B are different in type. The constraint does not apply to example (49) discussed earlier, or a similar sentence like jaa?a muhammadun raakiban hisaanan 'came Muhammad riding a horse', because in this example the adjective raakiban 'riding' does not occur in a head modifier construction with the NP muhammadun, as shown in the following representation:

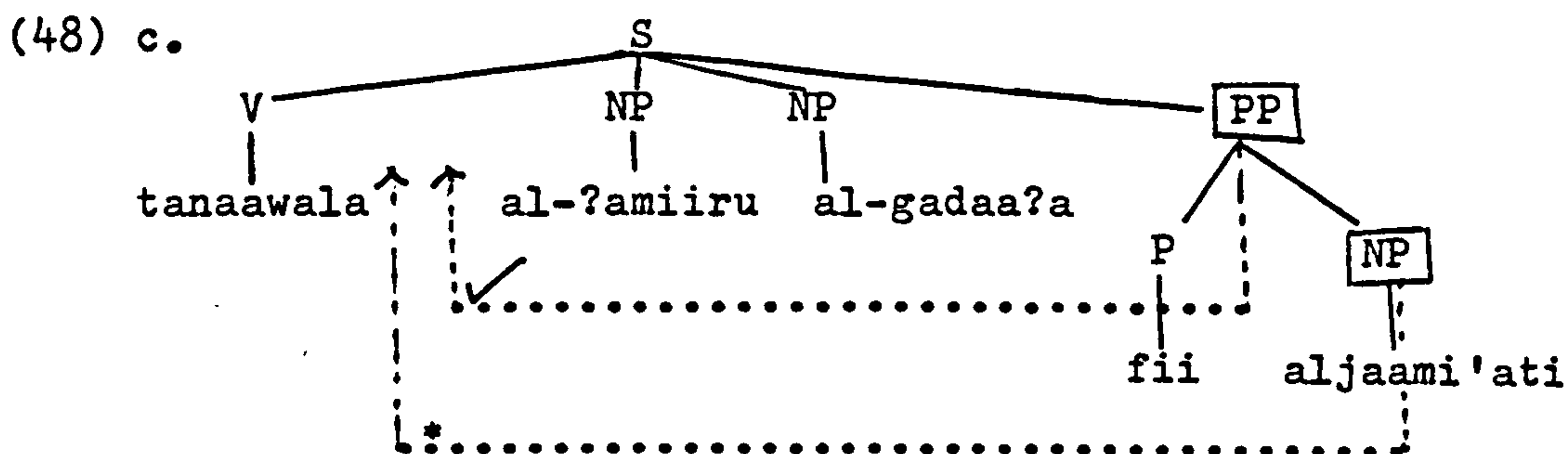


Sentence (46a) is asterisked as ungrammatical because the modifier (adjective) az-zaa?ira 'the visiting' is moved from the head-modifier construction alwafda az-zaa?ira. The movement of the modifier to the left of its head results in ungrammaticality. Rule (44), then, cannot apply; i.e. it will not move the adjective az-zaa?ira, which is an X' category, because it is dominated by a higher X' category.

Note that the category A' is required, since adjectives can have complements, as in baladun ġaniyyun bi- aḡhabī ('a country -rich-in-gold'), and specifiers, as in ġaniyyun jiddan ('rich-very'). Rule (44), that is to say, moves the whole N': hence the grammaticality of (46b), illustrated in (46c)./

governed NP aljaami'ati cannot be moved from its head, the preposition, as we assumed earlier. Only the whole PP can be moved to a position to the right of the verb in the verb-attraction movement. Hence, (48b) is grammatical as shown in the phrase marker (48c):

(48) b. tanaawala fii l-jaami'at-i al-?amiir-u al-gadaa?-a

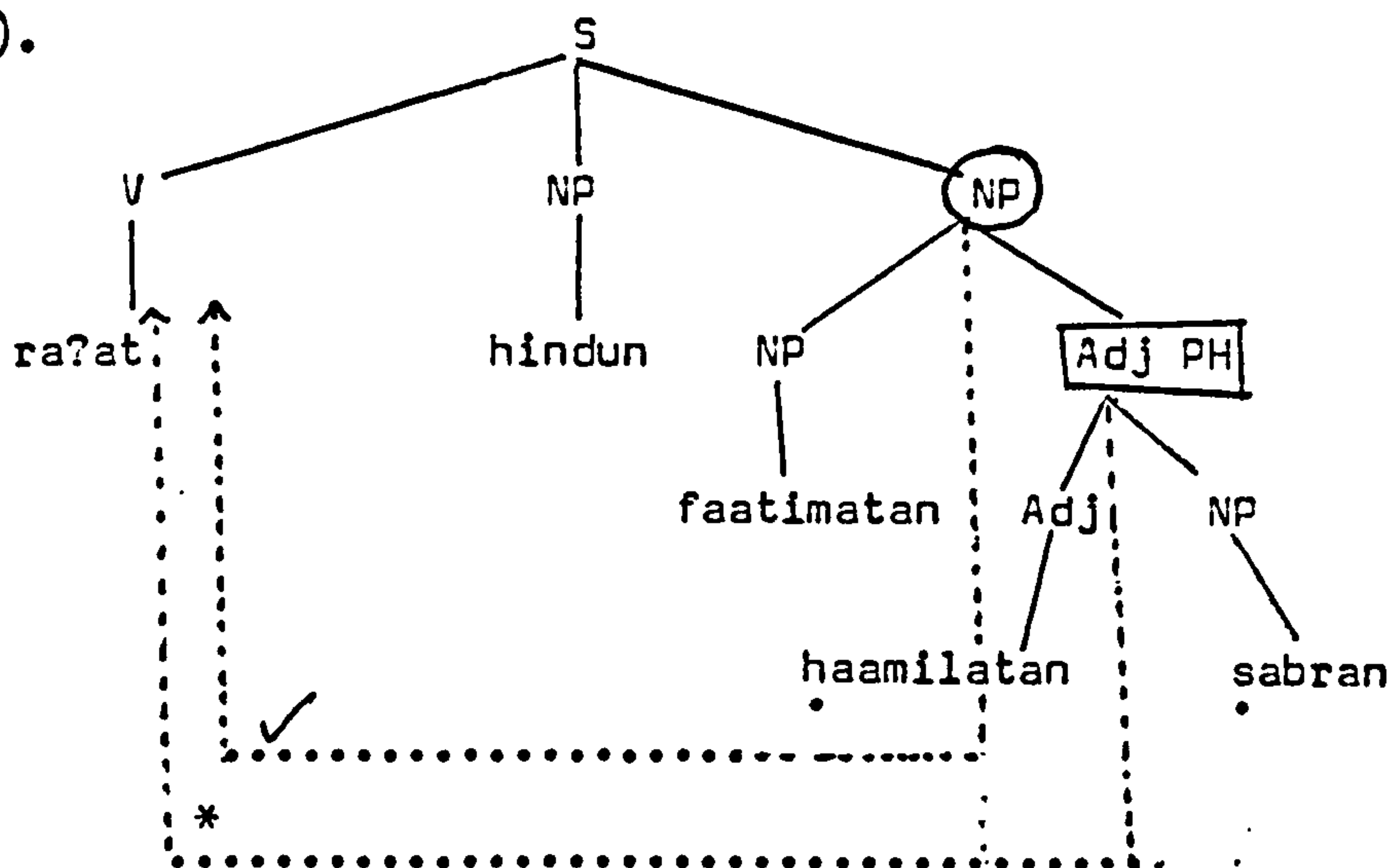


Looking at the surface distribution of such adjectival phrases as the participles and not treating them as embedded sentences, we can proceed to explain sentence (49a) according to the same constraint, i.e. MMC. In other words, we are assuming here that the construction haamilatan sabran has the participle haamilan as the regent, a verb-like, and sabran 'cactus' as the operative, and the regent governs its operative. This accords with the traditional view of Governor and Governed or Regent and Operative. Also, looking at haamilan as a verb form directly inserted into the phrase marker, without any transformation, is in line with the lexicalist approach adopted here. Furthermore, taking the whole adjectival phrase haamilatan sabran 'carrying cactus' as a modifier of the preceding head faatimatan, this phrase cannot cross over its head to reach the position immediately to the right of the verb. In other words, the modifier haamilatan sabran cannot be moved to the left of its head in the verb-attraction movement. Only the/

whole construction can be moved, as in the grammatical sentence (49b) and as shown by the phrase marker (49c) below:

(49b). raʔat faatimatan haamilatan sabran hindun

(49c).



The Modifier-Movement Constraint (MMC) can also handle such sentences as (51a) and (52a), where a participle modifying an NP is moved out of the NP-Participle construction:

(51) ʔahaba 'aliyy-un masruur-an ʔilaa l-madrasat-i

V	S	Part	PP
went	Ali-nom	happy-acc	to def-school-gen
"Ali went to school happy"			

a.* ʔahaba masruur-an 'aliyy-un ʔilaa l-madrasat-i

(52) wajada al-malik-u al-jayš-a mustaidd-an ʔamsi

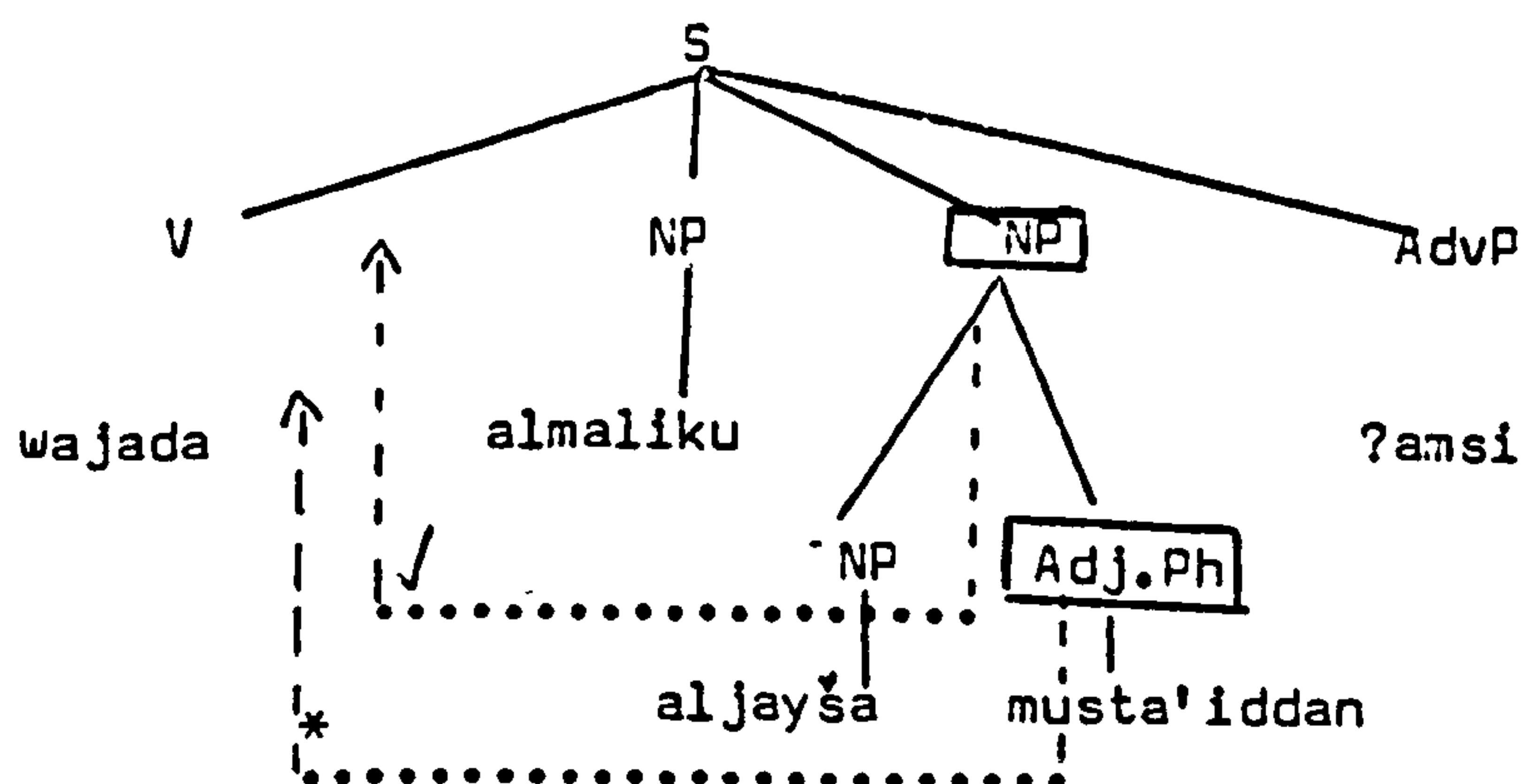
V	S	O	Part-Comp	Adv
found	def-king-nom	def-army-acc	ready-acc	yesterday
"The king found the army ready yesterday"				

a.* wajada mustaidd-an al-malik-u al-jayš-a ʔamsi

The participial complement in (51) and (52), masruuran and musta'iddan, is termed "al-haal" - condition or state - by Arab grammarians. Such complements designate the condition or state of the NP's. The traditional Arab grammarians' definition of the 'condition' is: the adverbial accusative of state or condition. They are participial in general, though sentence complements are not infrequent. Such participial complements could be dislocated to the right of the verb and nothing would be strange about their movement, if a transformational analysis was adopted. In other words, if these participial complements were derived from sentential sources by transformation, then they would be an X' category, like ordinary categories, and rule (44) would apply. Bakir (1979) argues that "the difference between the construction and the ordinary sentential construction is the existence of a morphological marker that provides the necessary information for the morphological ... change in the verb form". In other words, this morphological marker would be generated at the same place as the pre-verb. "Thus, a PS-rule would rewrite V as Pre-V and Pre as PM, or Participial Marker" (Ibid.). However, these participial complements do not have an independent status from ordinary NP constituents; rather, they are part of the NP itself. In fact, in a lexicalist approach, there will be no problem; these forms will be listed in the lexicon under certain lexical entries, with their selectional restrictions and subcategorizational frames. They will be directly inserted into the phrase marker. Rule (44) will move the whole NP-participle to the right of the verb, as in (52 b), and as shown by the phrase marker (52c) below:

(52)b. wajada al-jayš-a musta'idd-an al-malik-u ?amsi

(52)c.



"aljayša musta'iddan" to the right of the verb, which provides strong evidence that participial complements are generated within the NP's rather than outside of them. Moreover, that the 'haal' participial complement is generated within the NP accords with the fact that these complements are semantically related to nouns which are governed by prepositions. This is why such complements cannot dislocate to the right of the verb; notice the grammaticality of (53b) in contrast with the ungrammatical (53a):

- (53) marra fu?aad-un bi-hind-in daahikat-an
V S PP(P+NP (NP+Part.P))
passed Fuad-nom by-Hind-gen laughing-acc
"Fuad passed by Hind laughing"
a* marra daahikat-an fu?aad-un bi-hind-in
b. marra bi-hind-in daahikat-an fu?aad-un

Thus, the rule would move the whole PP "bi-hindin daahikatan" to the right of the verb.

We mentioned earlier that some constituents cannot be moved to the right of the verb. The participial phrase, governed by the MMC, is a case in point. As we also said, the structure of this complement is NP + Participial Complement. The rule will move the higher node, i.e. the whole phrase of the structure X' . However, it is interesting to note that the complements in (51), (52) and (53) can be extracted and postposed, i.e. extraposed to the end of the sentence:

- (51) b. šahaba 'aliyy-un ?ilaa l-madrasat-i masruur-an
 V S PP Part.
- (52) b. wajada al-malik-u al-jayš-a ?amsi musta'idd-an
 V S Ō Adv Part
- (53) c. marra fuʔaad-un bi-hind-in fii s-suuq-i daahikat-an
 V S PP PP Part

In fact, we need extraposition in the Arabic verb-initial sentence for the movement of other constituents, besides participial phrases, to the end of the sentence. Prepositional phrases complementing nouns appear at the end of the sentence:

(54) ?axa^xba s-suwwaah-u fikrat-an min ad-daliil-i 'an l-?urdunn-

V S O PP PP

took def-tourists-nom idea-acc from def-guide-gen about

def-Jordan-gen

"The tourists took an idea from the guide about Jordan"

In the above sentence, the prepositional phrase "'an al-?urdunni", complementing the noun "fikratan" is extraposed to the end of the sentence.

The rule of extraposition from an NP can be approximated as follows:

(55) X - +N. ' ' [N ' [-N] ' '] - Y

1 2 3 4 → 1 2 4 3

This rule will move X' categories other than NP's and Adj. Phrases which are [+N], to the end of the sentence. In passing, it is worth noting that Chomsky (1970) uses binary sets of features, collapsing major lexical categories like Nouns, Adjectives, Verbs and Prepositions, in order to capture the generalization of certain rules over more than one syntactic category. Thus, he uses the binary sets of features as follows:

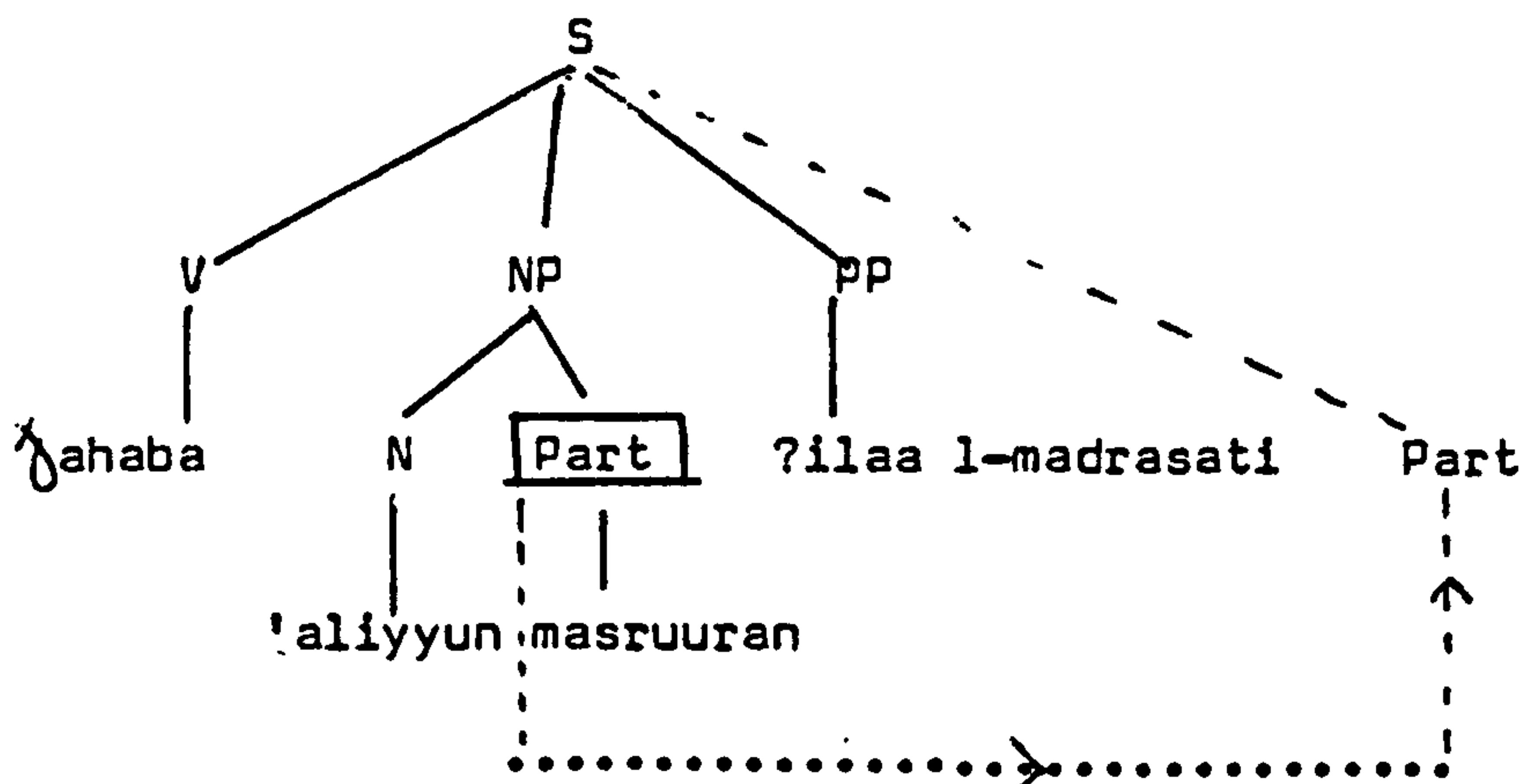
Noun: [+N, -V]
Verb: [-N, +V]
Adj: [+N, +V]
Prep: [-N, -V]

This is why the [-N] feature is used in the above rule. Thus the rule

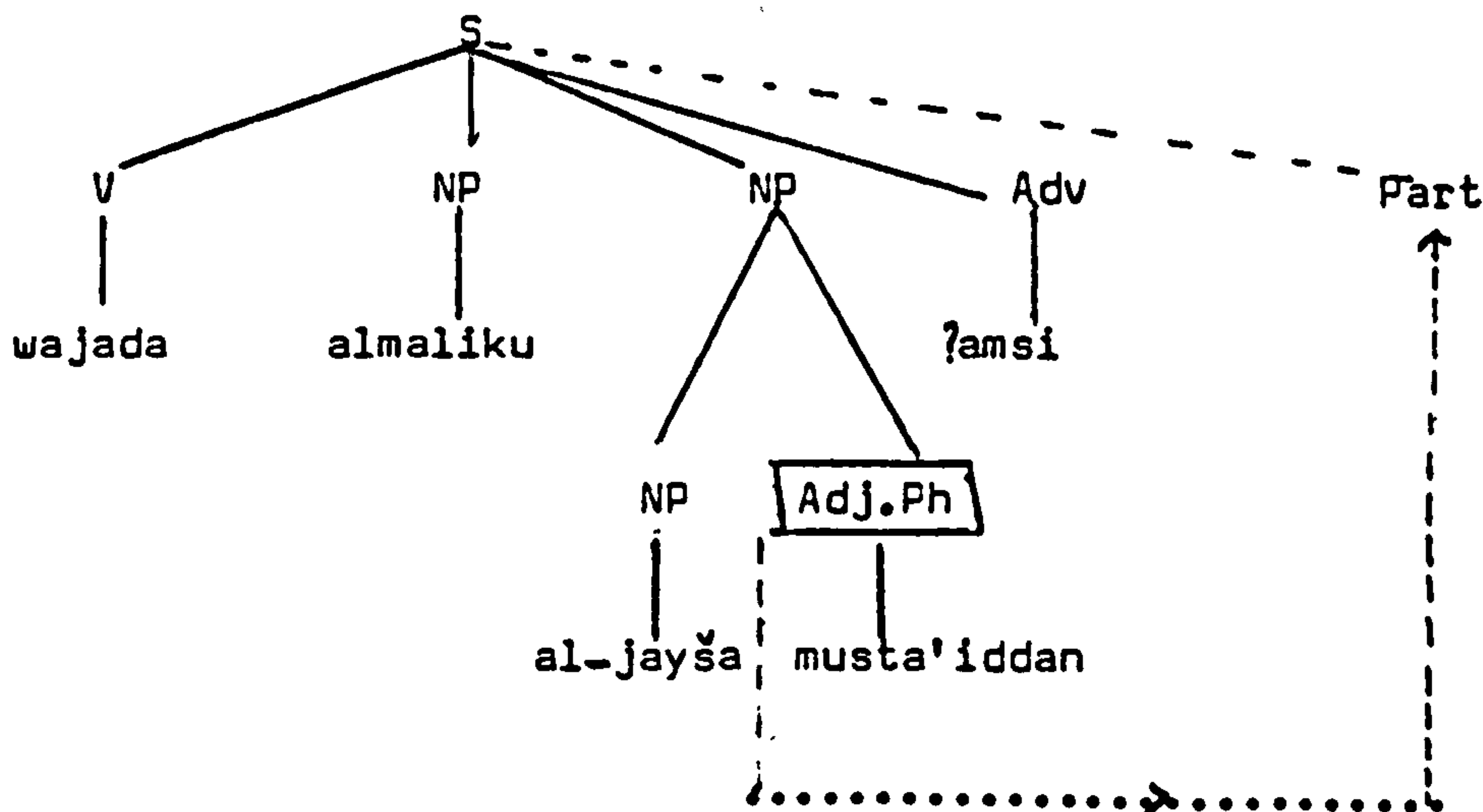
of extraposition will apply to participial phrases and prepositional phrases within the NP, i.e. since they are $[-N]$, to the exclusion of N'' and A'' since they are both $[+N]$.

To tidy up our discussion, the rule of extraposition will move the participle masruuran to the end of sentence (51) and musta'iddan to the end of sentence (52), and the prepositional phrase 'anal-?urdunni' to the end of sentence (54). The following phrase markers exhibit this extraposition.

(51) c.

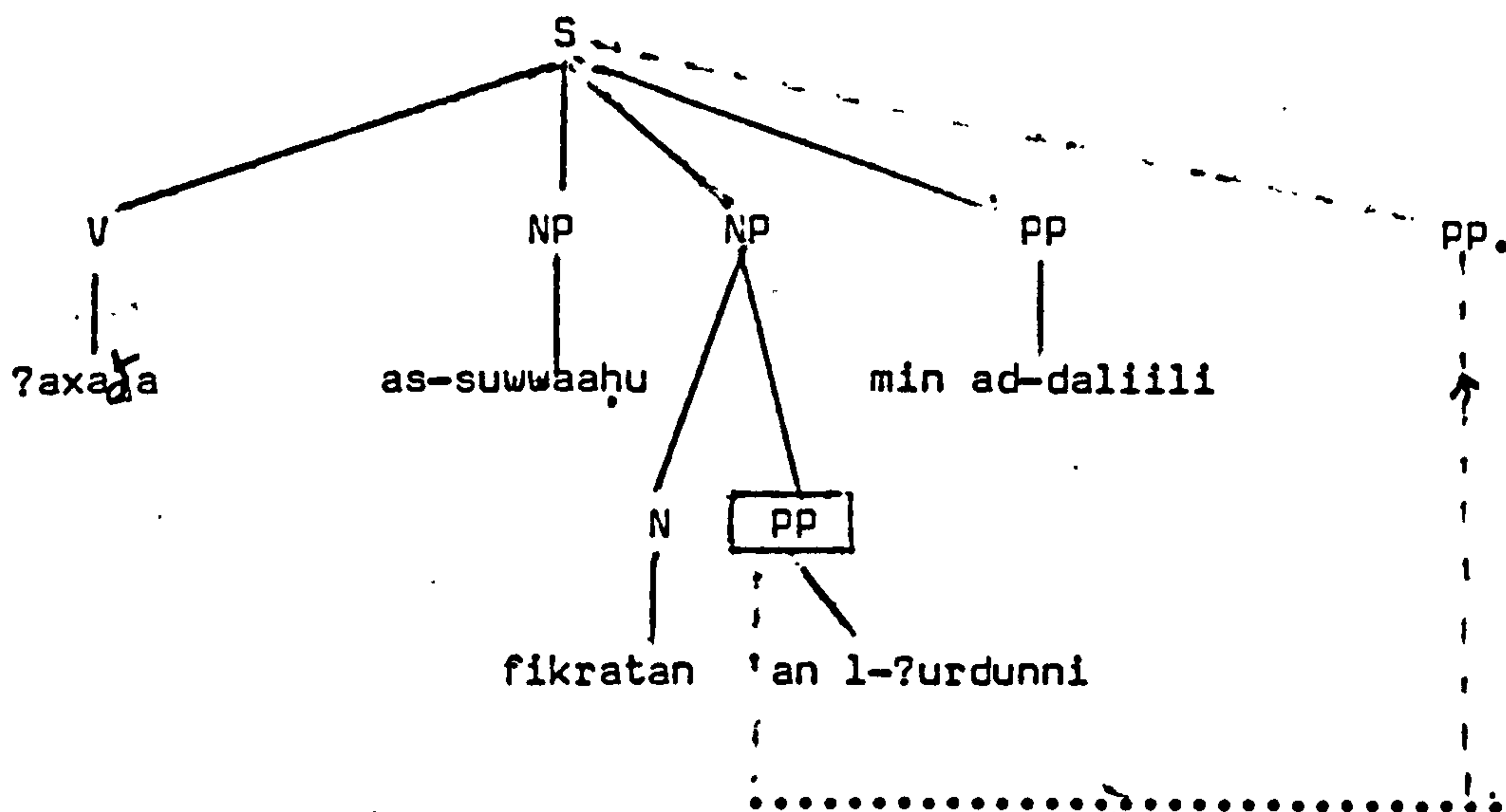


(52) c.



(54) /

(54)



After these complements and prepositional phrases are extraposed to the end of the sentence, rule (44), repeated below for ease of reference, may apply so that these constituents can move to the right of the verb.

(44)

V Z X''

1 2 3 → 1+3 2 t

This will enable us to get (51a) and (52a) from the application of the rule to (51b) and (52b). We will also get (54b) from (54):

(54) b.

?axaḡa 'an l-?urdunn-i as-suwwaah-u fikrat-an

V

PP

S

O

took about def-Jordan-gen def-tourists-nom idea-acc

min ad-daliil-i

PP

from def-guide-gen

However, this sentence is ungrammatical and this can be explained by placing some constraint on extraposition: a constraint like the MMC.

On the other hand, the Verb-Attraction rule could apply to the output of extraposition to derive the incorrect sentence (51a). One way to

avoid this undesirable consequence is to use rule-ordering, applying Verb-Attraction before Extraposition. Although rule-ordering is now out of favour, it provides a solution to this descriptive problem, and I shall, for present purposes, ignore the ban on ordering, (cf. Iwakura, 1978). The data, however, will be relevant to the development of an ordering-free model.

In this chapter, I have discussed the phenomenon of displacement or dislocation in the Arabic sentence. Dislocation was 'broken up' into two broad processes, left-dislocation and verb-attraction. It was shown that constituents dislocate to the left of the verb, subject to some constraints. It was also shown that constituents can undergo the verb-attraction movement to reach a position immediately to the right of the verb. However, while the left-dislocation process exhibited more freedom as to the movement of constituents, the verb-attraction process allowed some constituents to move and blocked others. In other words, verb-attraction is more restricted by some general constraints on movement, the Co-ordinate Structure Constraint and the Modifier-Movement Constraint. It was also shown that these two processes of movement are different from each other on structural as well as functional grounds; this is to say that any change in word order signals changes in pragmatic functions. This necessitated a distinction between the two processes and a separate treatment of each. However, a more thorough investigation of left-dislocation is needed, and I discuss this in the following chapter.

3. Left-Dislocation

3.1. Preview

In the previous chapter, I discussed some general aspects of left-dislocation, by which I mean the occurrence of constituents of various syntactic categories to the left of the verb in the Arabic VSO order. Sentences (13b - 16b) were given as examples exhibiting this phenomenon. I also discussed the Verb-attraction movement, more precisely the leftward movement of constituents from their original place to a position immediately to the right of the verb. In connection with the verb-attraction movement, extraposition was discussed as a process that extraposes constituents, freeing them from their major categories, and then left-dislocating them before the verb.

The distinction between left-dislocation and verb-attraction processes was made on the basis of some facts in Arabic: some sentences allow left-dislocation but not verb-attraction (sentences 34 + 35); there are also cases that allow verb-attraction but not left-dislocation (sentences 38a, 39a, 40a). Furthermore, in a linear order, the two processes should be distinguished.

In this chapter, I discuss left-dislocation in detail, following the same line of analysis adopted in the previous chapter, in order to account for the relationship that obtains between such pairs of sentences as the following:

- (1) a. kataba muhammad-un risaalat-an
 .
 wrote Muhammad-nom letter-acc

 'Muhammad wrote a letter'
- b. risaalat-an kataba muhammad-un

- (2) a. ḥadara muḥammad-un al-^bbaarihata
 came Muhammad-nom yesterday
 'Muhammad came yesterday'
- b. albaarihata ḥadara muḥammad-un
- (3) a. ʔahaba al-walad-u ʔilaa s-suud-i
 went the-boy-nom to the-market-gen
 'The boy went to the market'
- b. ʔilaa s-suud-i ʔahaba al-walad-u
- (4) a. raʔaa muḥammad-un 'aliyy-an mubtasim-an
 saw Muhammad-nom Ali-acc smiling-acc
 'Muhammad saw Ali smiling'
- b. mubtasim-an raʔaa muḥammad-un 'aliyy-an

In examples (b) above, constituents of various syntactic categories are left-dislocated, appearing before the verb. Before discussing the details of this process, I shall draw a distinction between (sentences like the above and sentences that are of the Topic-Comment type. The latter type will be dealt with in Chapter IV. The rationale behind this distinction is based on criteria that will also be discussed in Chapter IV.

3.2. Left-Dislocation:

In what follows, I discuss the details and constraints of this movement process of left-dislocation. I shall also be using such terms as 'focusing', 'preposing' or 'fronting' in the same sense of left-dislocation. Let us give more data:

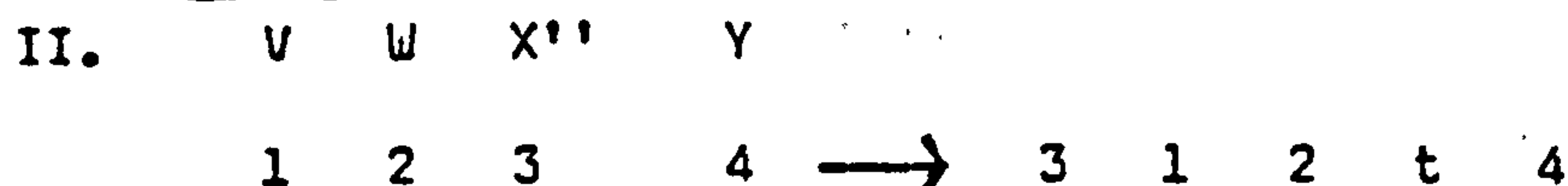
- (5) a. fataha al-walad-u al-baab-a
 opened the-boy-nom the-door-acc
 'The boy opened the door'
- b. al-baab-a fataha al-walad-u

- (6) a. raja'a xaalid-un min al-madrasat-i
 returned Khalid-nom from the-school-gen
 'Khalid returned from school'
- b. min al-madrasat-i raja'a xaalid-un
- (7) a. 'uqida al-ijtimaa'-u fii manzil ṣadiiq-ii ʔamsi
 held(pass) the-meeting-nom in house friend-mine yesterday
 'The meeting was held at my friend's house yesterday'
- b. ʔamsi 'uqida al-ijtimaa'-u fii manzil ṣadiiq-ii
- (8) a. 'aada 'aliyy-un masruur-an ʔilaa l-bayt-i
 came Ali-nom happy-acc to the-house
 'Ali came to the house happy'
- b. masruur-an 'aada 'aliyy-un ʔilaa l-bayt-i
- (9) a. raʔat hind-un fuʔaad-an daahik-an
 saw Hind-nom Fuad-acc laughing-acc
 'Hind saw Fuad laughing'
- b. daahik-an raʔat hind-un fuʔaad-an
- (10) a. naṣarat as-ṣuḥuf-u maqaalat-an 'an l-ʔurdunn-i
 published the-papers-nom article-acc about the-Jordan-gen
 'The papers published an article about Jordan'
- b. 'an l-ʔurdunn-i naṣarat as-ṣuḥuf-u maqaalat-an

As stated earlier, the (b) sentences exhibit the appearance of constituents to the left of the verb, and given the conclusions arrived at in a previous chapter about the underlying structure, we can say that the relation between the (b) sentences and the (a) sentences, in which the same constituent shows up to the 'right' and left of the verb, is that of preposing of certain elements from a place after the verb-post-verbal- to a place before the verb - pre-verbal. In other words, both (a) and (b) structures above are transformationally related by a movement transformation.

Such a movement transformation can be represented as: (See Chapter IV for discussion of X-bar)

Left-dislocation:



This rule will apply on structures exemplified by the (a) sentences with the output being structures exemplified by the (b) sentences.

However, the above rule has certain general properties: as it stands, it says that any major syntactic category - NP, PP, AP - that is to the right of the verb can show up on the surface to the left of the verb, and the previous set of sentences exhibit that. Yet, if this rule (II) applies freely without any constraints, we will get some ungrammatical constructions as exhibited by the (b) sentences of the sentence-pairs below, while the (a) sentences which serve as the input to the rule are grammatical:

- (12) a. kataba 'aliyy-un 'alaa t-taawilat-i
 wrote Ali-nom on the-table-gen
 'Ali wrote on the table'

*b. at-taawilat-i kataba 'aliyy-un 'alaa

- (13) a. ?axaʃ at hind-un kitaab-a muhammad-in
 took Hind-nom book-acc Muhammad-gen
 'Hind took Muhammad's book'

*b. muhammad-in ?axaʃ at hind-un kitaab-a

- (14) a. baa'a at-taajir-u fuul-an wa qamh-an
 sold the-merchant-nom beans-acc and wheat-acc
 'The merchant sold beans and wheat'

*b. { fuul-an baa'a at-taajir-u wa qamh-an
 qamh-an baa'a at-taajir-u fuul-an wa t

- (15) a. sarra-nii fahm-u zuheir-in ad-dars-a
 pleased-me understanding-nom Zuheir-gen the-lesson-acc
 'Zuheir's understanding of the lesson pleased me'
 *b. ad-dars-a sarra-nii fahm-u zuheir-in

We notice that the left-dislocated elements in the (b) sentences above are NP's but the sentences are ungrammatical. Rule (11) as it stands does not prevent such major constituents from being fronted, which means that the (b) sentences should be grammatical. It seems plausible then either to reformulate the rule in such a way that its application on such NP's is blocked or to see whether the ungrammaticality of those sentences is related to and part of a more general principle governing the application of transformations in general.

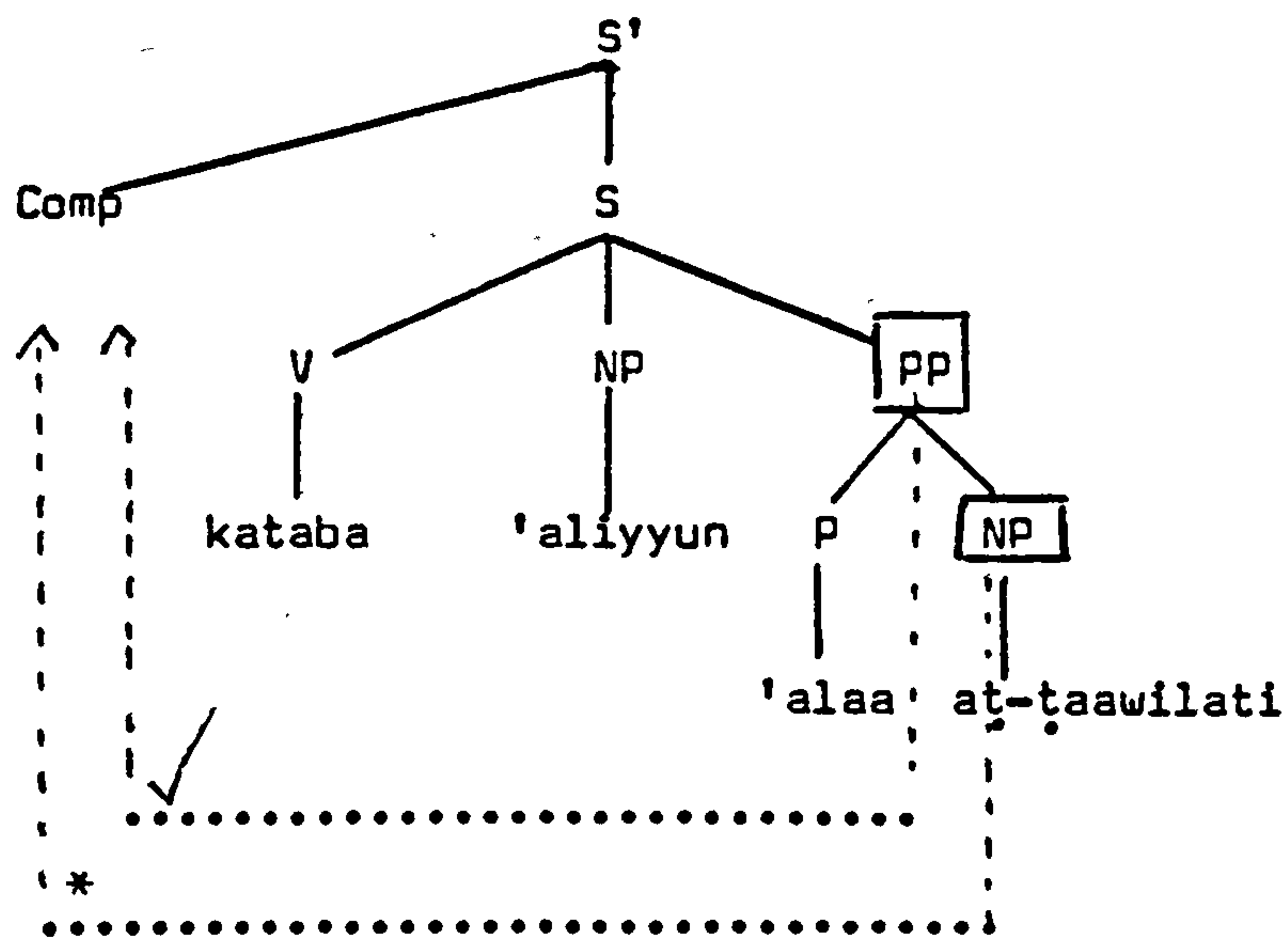
A closer look at the above sentences would direct us towards choosing the second alternative, i.e. a general principle of rule-application.

Referring back to discussion of constraints in Chapter II, we find that the Modifier-Movement Constraint is needed here as well. There, we assumed that in a prepositional phrase pp [P NP], the preposition is the head of the construction; that in a participial phrase part phr [Part NP] or part phr [Part Adv] (sentences 34+35), the participle is the head of the construction; and that the head of a sequence [NP NP_{gen}] is the first NP. We also saw that moving the modifier out of the head-modifier construction results in ungrammaticality.

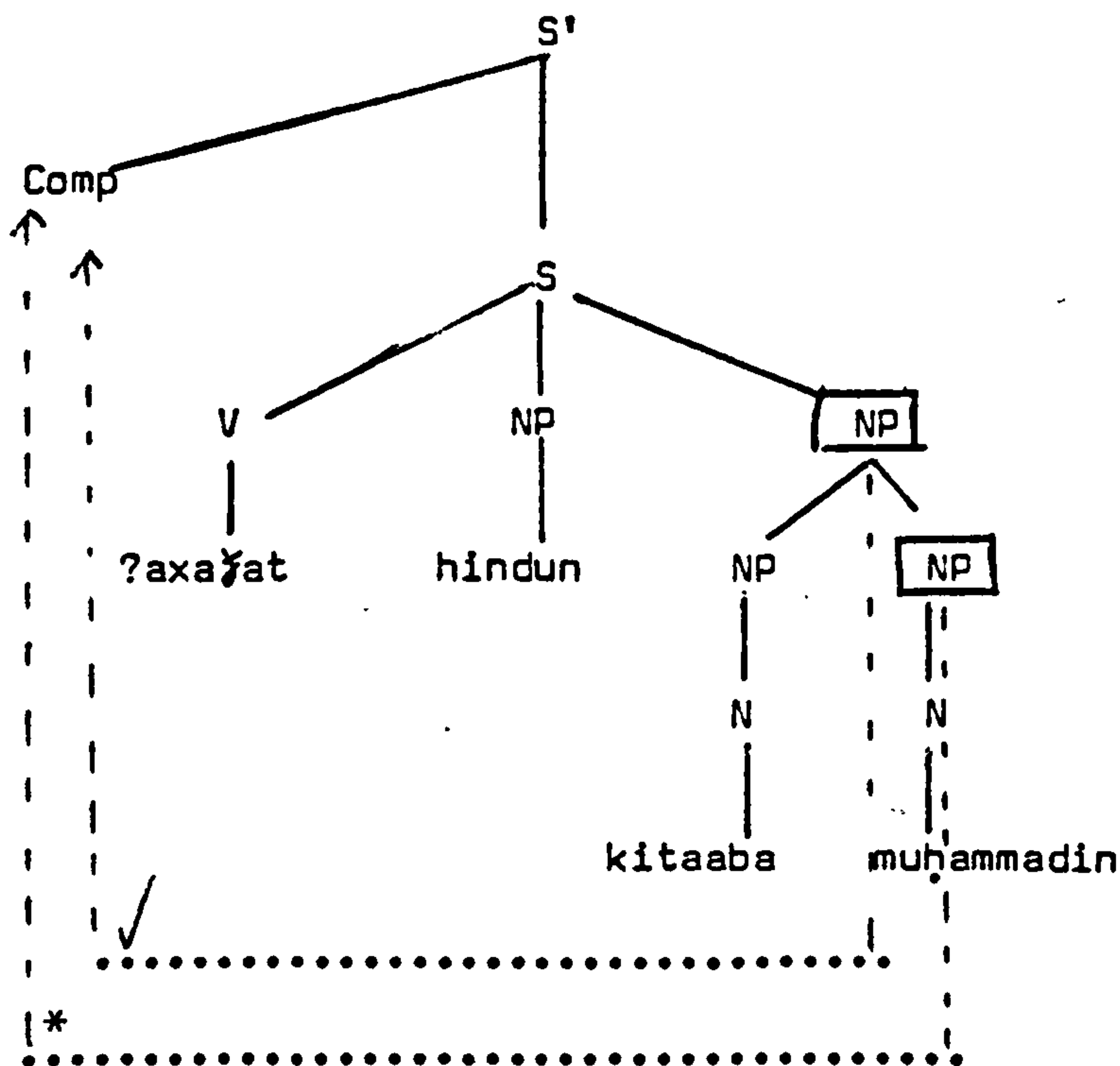
Thus, the Modifier-Movement Constraint (MMC) governs the application of rule (II) above. This will correctly predict the ungrammaticality of the (b) sentences in (12), (13), and (15). The ungrammaticality of (b) in (14) is accounted for by the previously discussed Co-ordinate Structure

Constraint. The following phrase markers illustrate this point:

(12)'

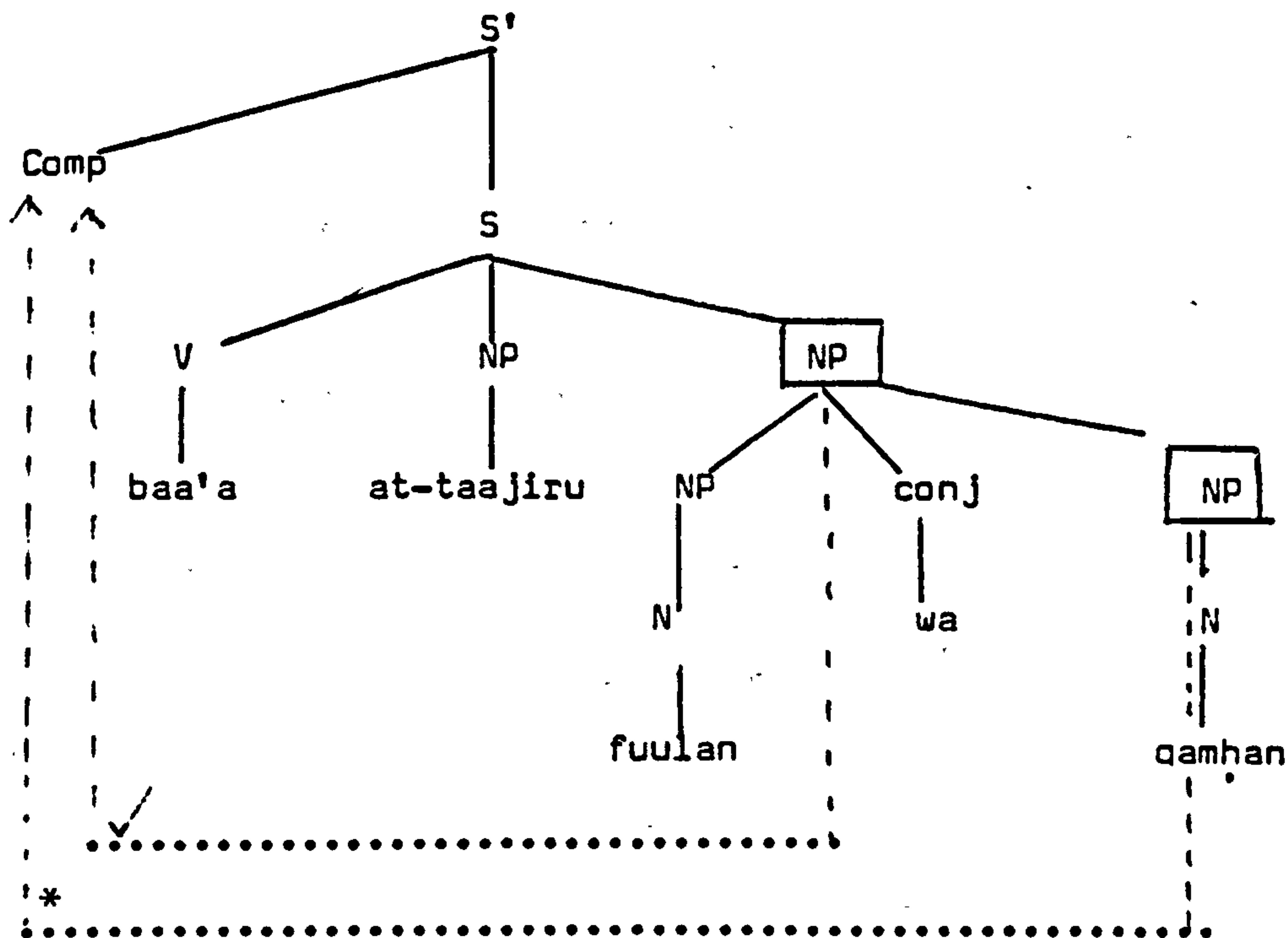


(13)'

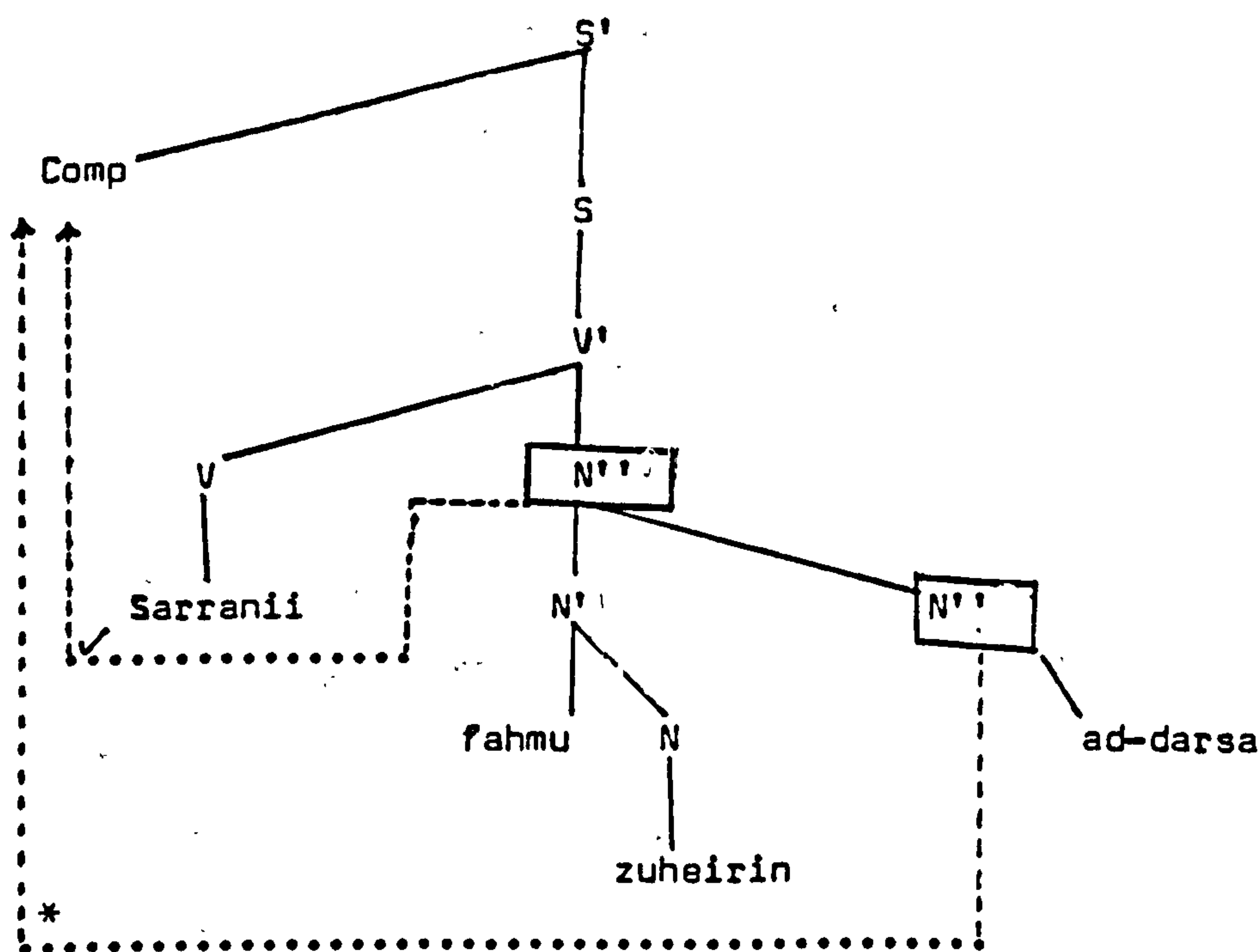


(14)'

(14)'



(15)'



The MMC will then apply to the highest category X'. This means that the NP's in the ungrammatical (b) sentences were taken from within higher major categories. This general principle then will left-dislocate

the constituents 'alaa at-taawilati, kitaaba muhammadin, and fahmu zuheirin ad-darsa. The CSC (Co-ordinate Structure Constraint) will left-dislocate all the conjuncts fuulan wa qamhan, as shown by the above phrase markers. The MMC will also handle (8 c), (9 c), and (10c), where both the head and modifier move:

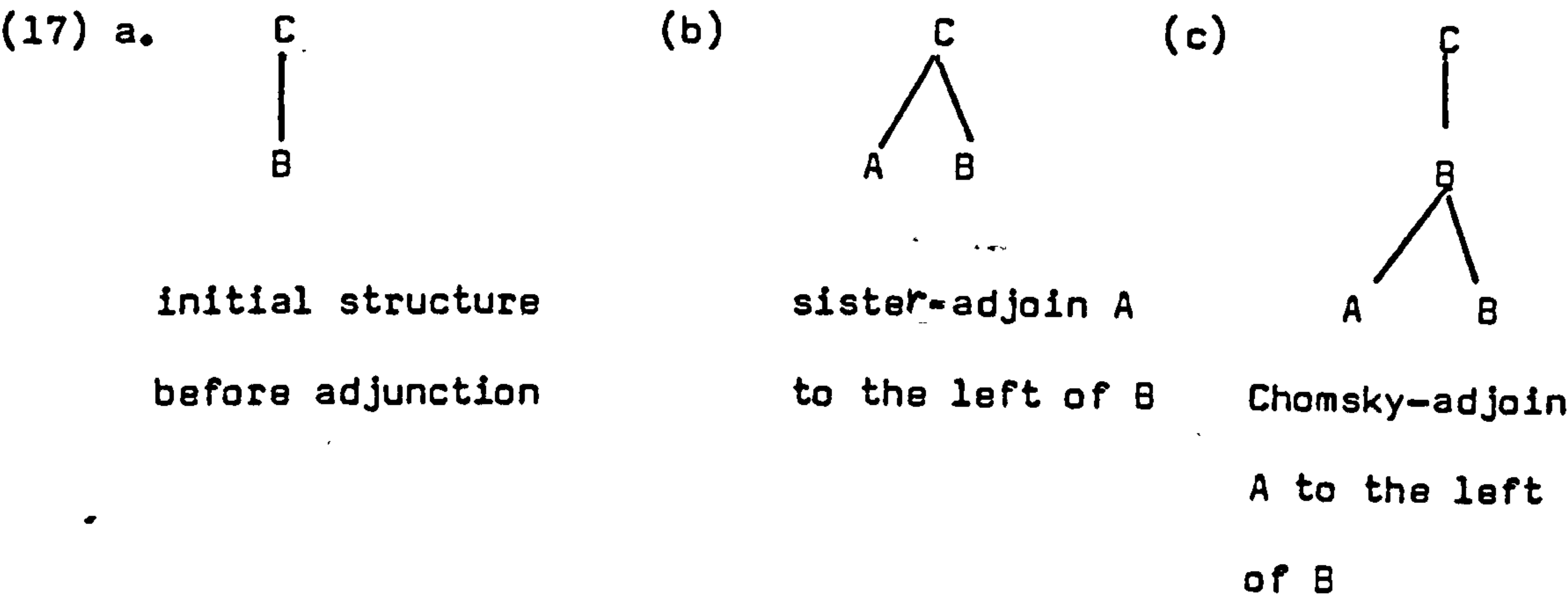
- 8c. 'aliyy-un masruur-an 'aada ?ilaa l-bayt-i
 9c. fu?aad-an daahik-an ra?at hind-un
 10c. maqaalat-an 'an al-?urdunn-i nasarat as-suhufu

The grammaticality of (8 b), (9 b), and (10 b) is also accounted for by the MMC. In other words, according to the MMC, while the NP can move as in (8c - 10c) above, part of a NP can also move, provided that part is a modifier but not governed. Recall also that the rule of extraposition, discussed in the previous chapter, and repeated below, will explain the grammaticality of (8b - 10b).

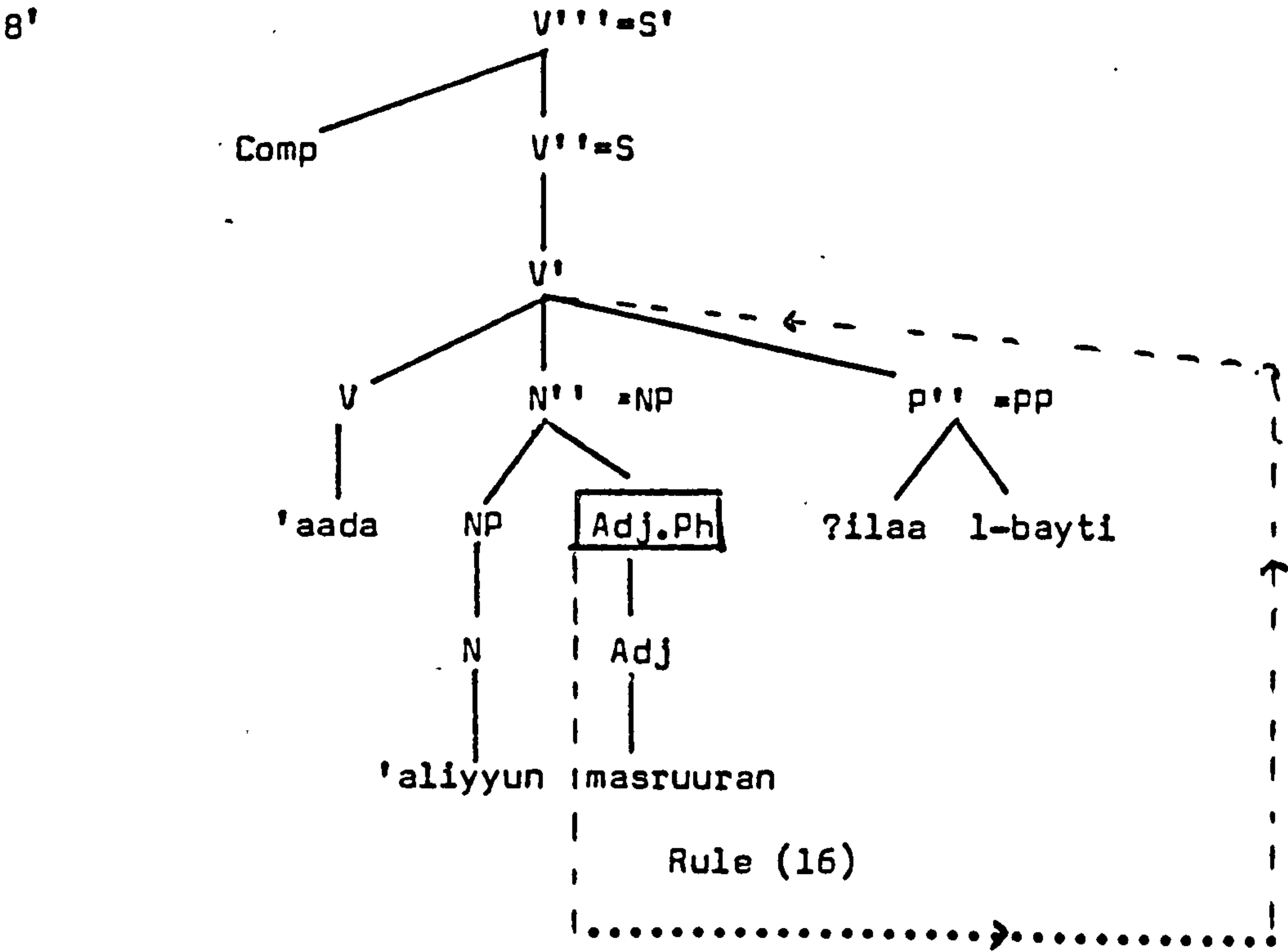
$$\begin{array}{ccccccc}
 16. & X & - & \begin{array}{c} \text{+N} \\ \text{[N]} \end{array} & \begin{array}{c} \text{[N]} \\ \text{[E]} \end{array} & \text{''} & \text{]} & - & Y \\
 & 1 & & 2 & 3 & & 4 & \longrightarrow & 1 & 2 & 4 & 3
 \end{array}$$

This rule will free the elements from the NP's they originate within by first extraposing them to the end of the sentence and then sister-adjoining them to the other daughters of V' or V'' (see discussion of X-bar in Chapter IV). To sister-adjoin one constituent A to another constituent B is to attach A immediately under the node C immediately dominating B; also, to Chomsky-adjoin A to B means to create a new B node which immediately dominates both A + B; in either case, A can be adjoined either to the left or to the right of B. This can be represented

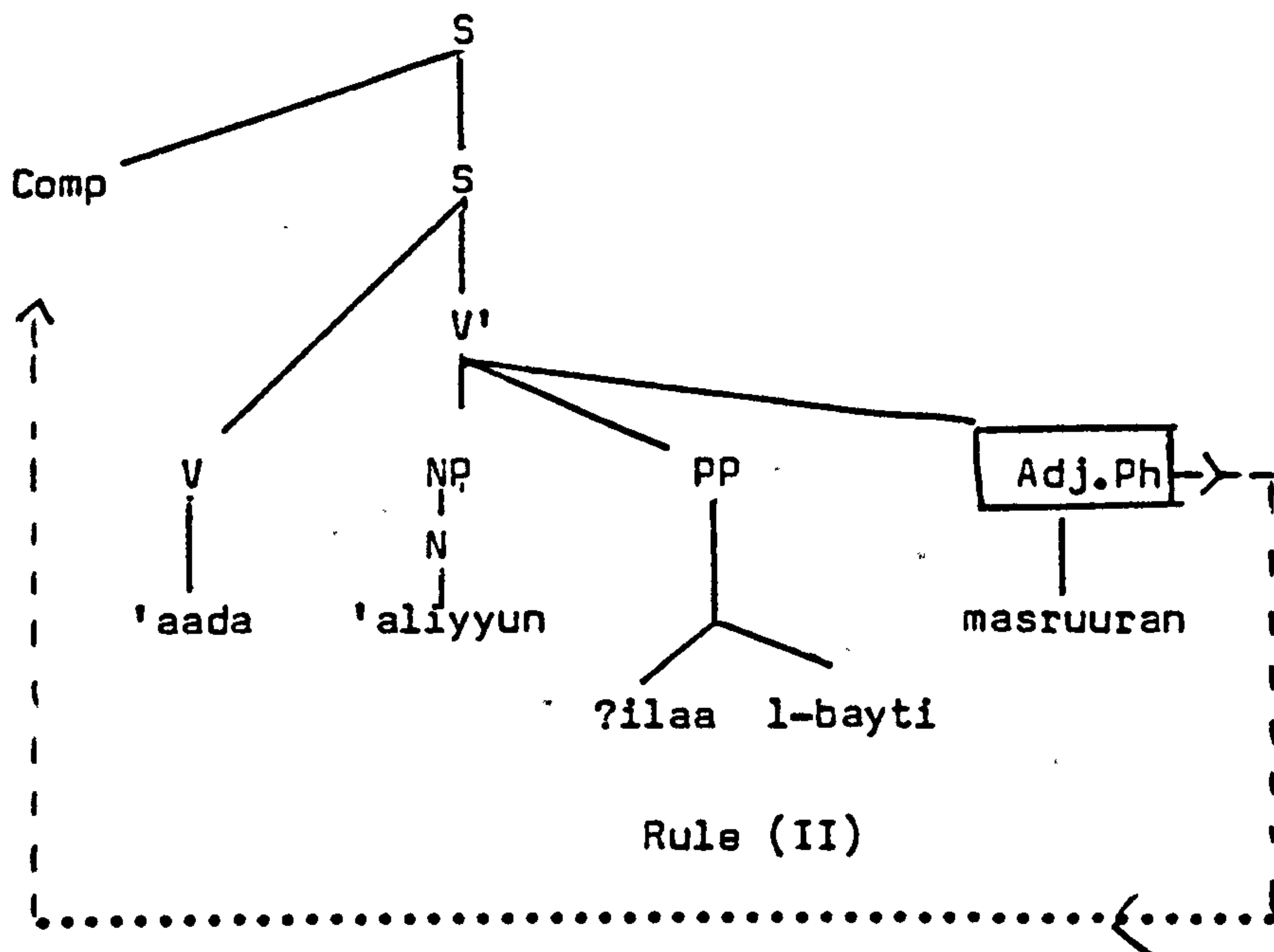
in the following manner (cf. Radford 1981, p. 170):



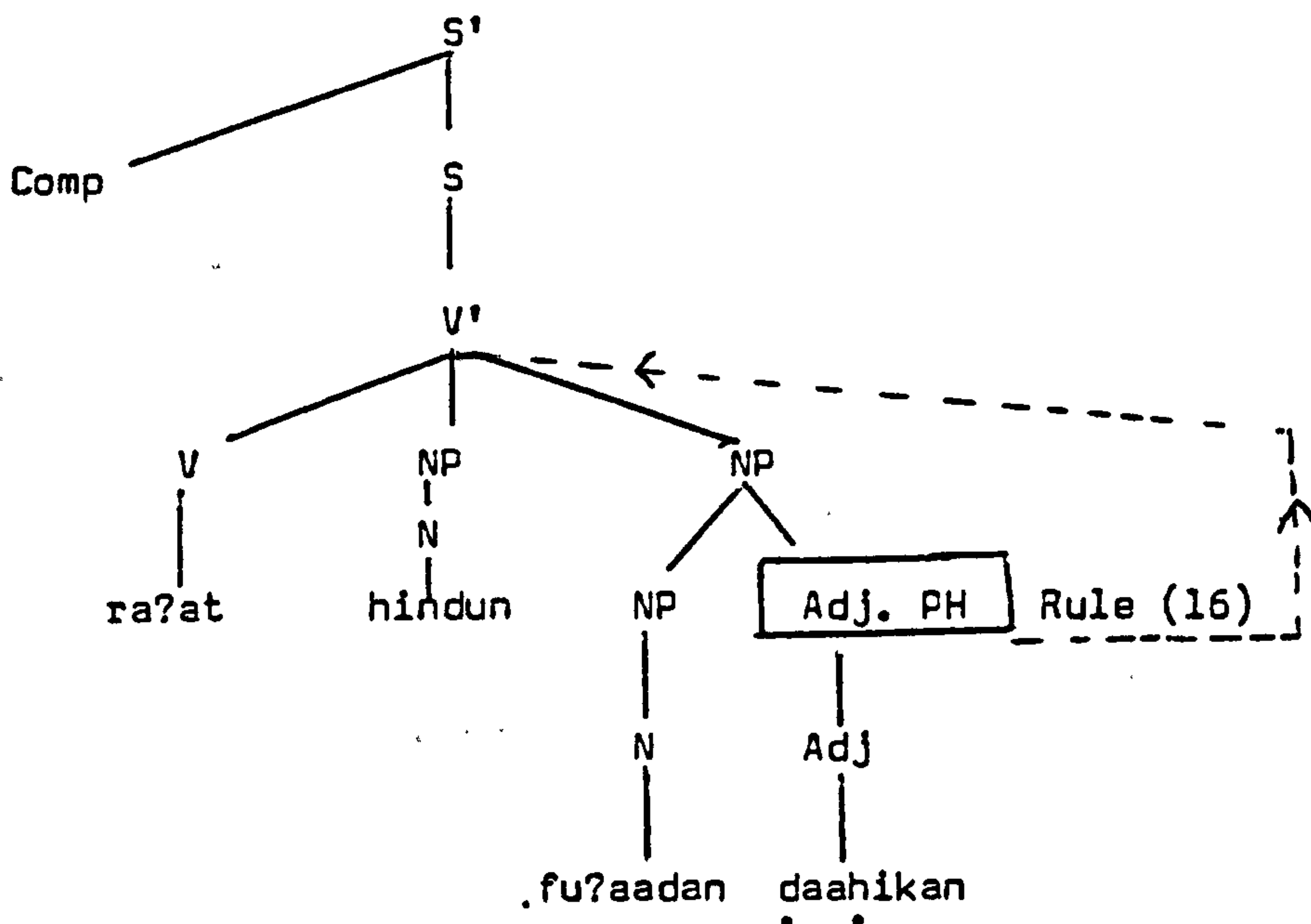
Returning to the issue at hand, the rule of extraposition will free elements from their NP's, extrapose and then sister-adjoin them to V' or V''. Rule (II) will take these extraposed elements and left-dislocate them, as illustrated by the following phrase markers: (Notice that there need be no extrinsic ordering between left-dislocation and extraposition).



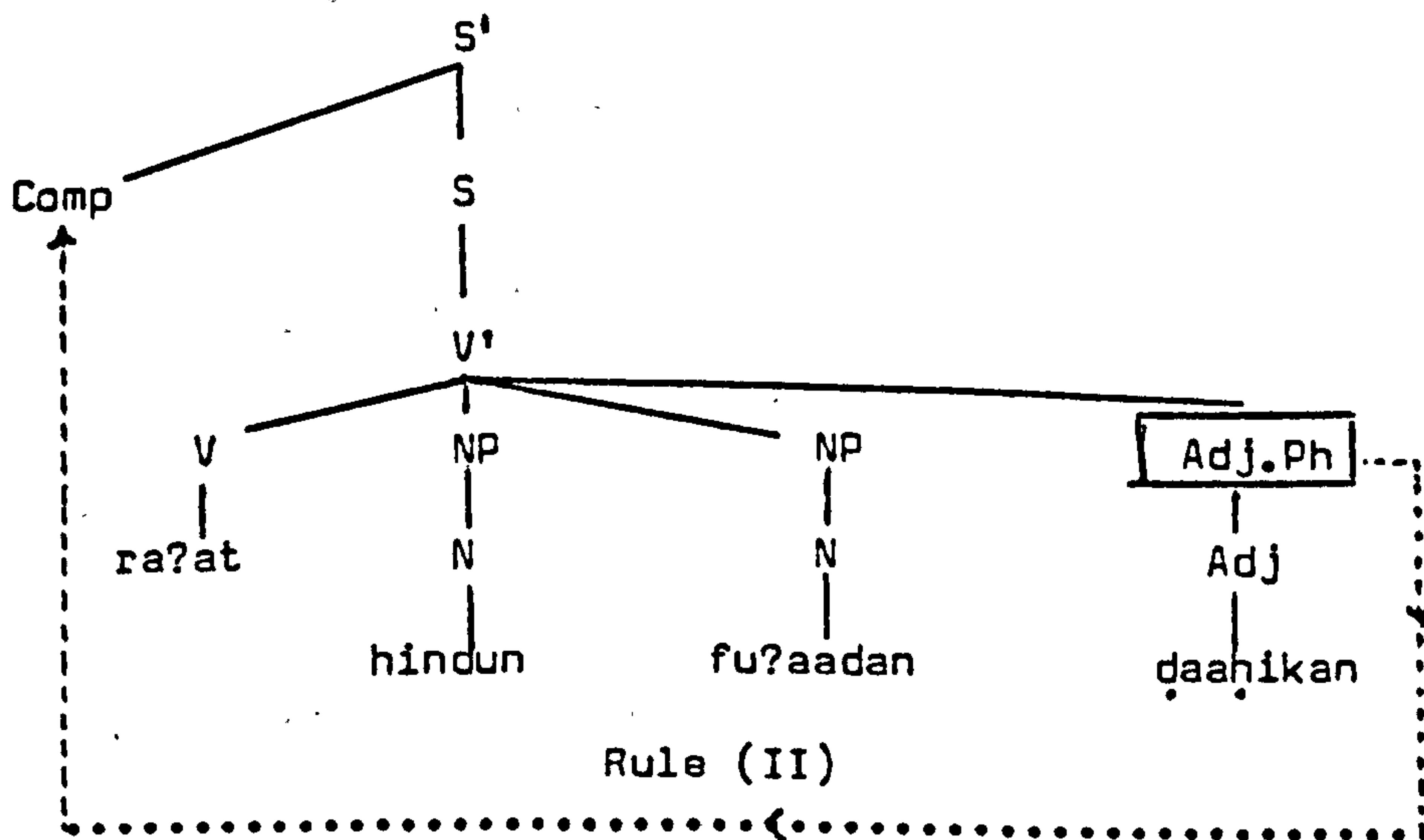
8''



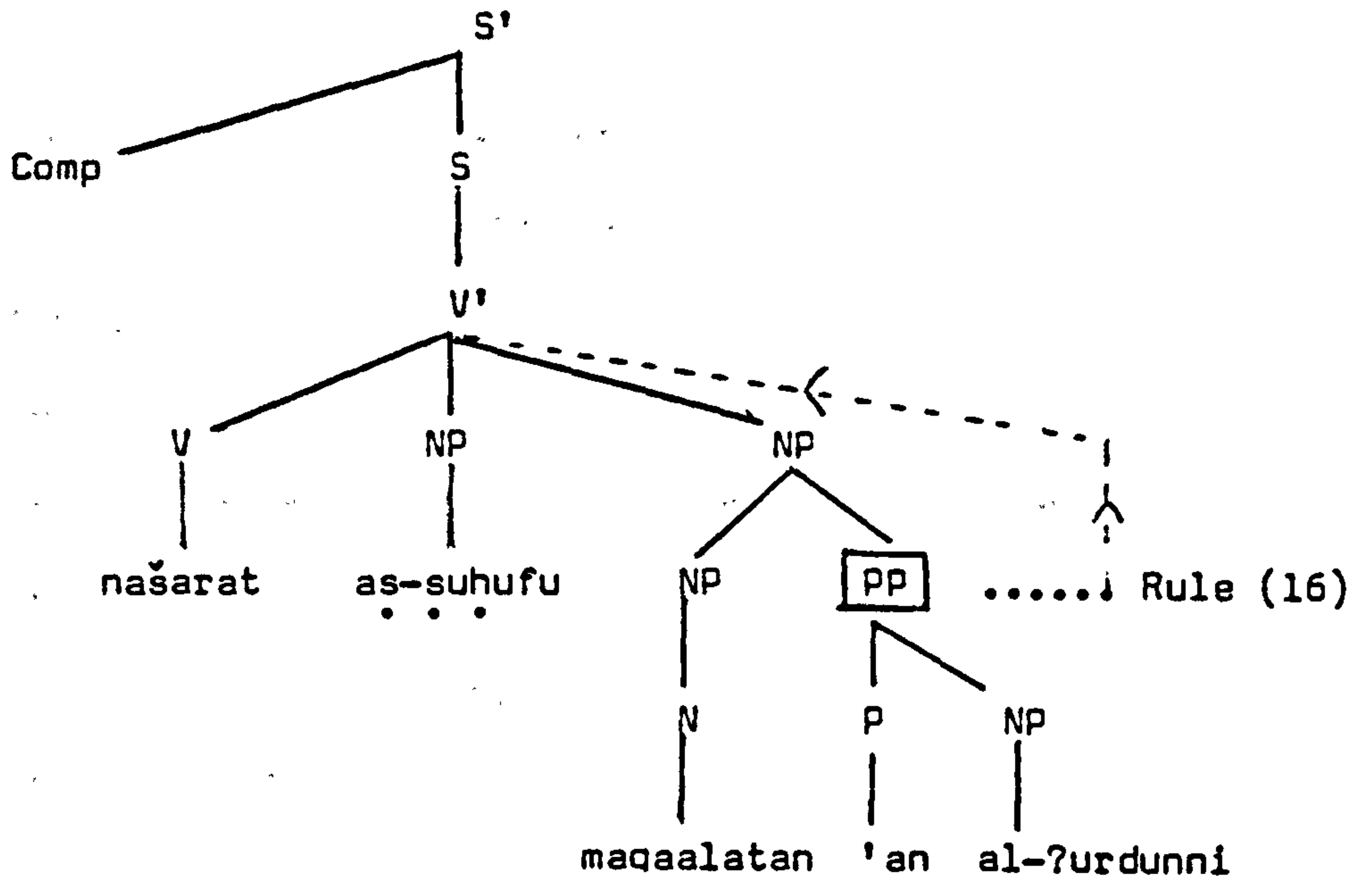
9'



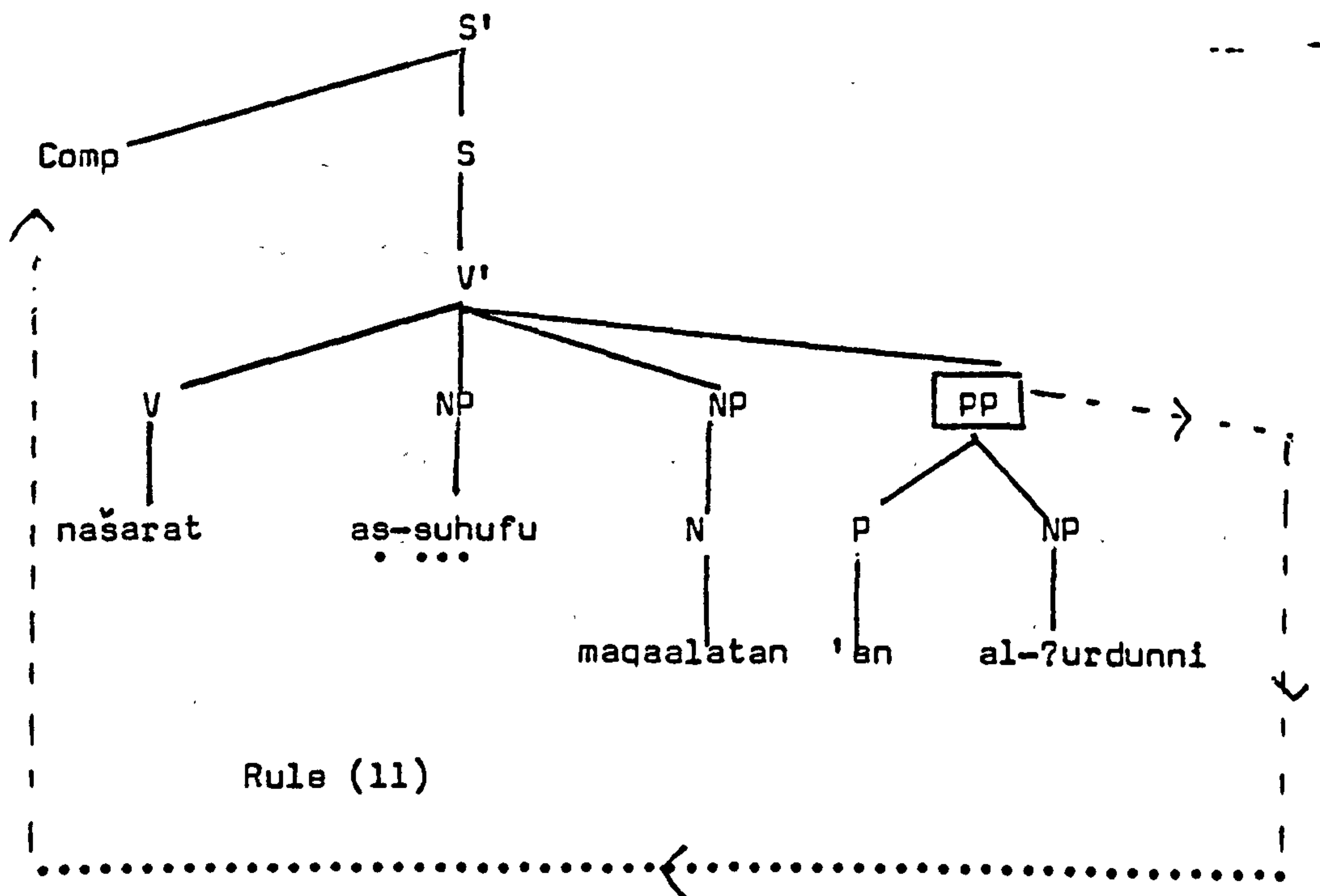
9''



10'



10''



3.2.1. Left-dislocation of wh- elements:

Assuming that wh-elements are generated at different places in the sentence, these elements will undergo a movement transformation in order for them to be left-dislocated or 'fronted'. We have already utilised Rule (11) to left-dislocate constituents. We can still use this

rule to prepose wh-elements. Consider the following sentences:

18. maa'aa fataḥa al-walad-u —
 what opened the-boy-nom
 'What did the boy open?'
19. mataa raja'a xaalid-un min as-safar-i
 when returned Khalid-nom from def-travel-gen
 'When did Khalid return from travel?'
20. kayfa 'aada 'aliyy-un —
 how came Ali-nom
 'How did Ali come?'
21. maa'aa naṣarat aṣ-ṣuḥuf-u - 'an l-?urdunn-i
 what published def-papers-nom about Jordan-gen
 'What did the papers publish about Jordan?'
22. ?ayna 'uqida l-ijtimaa'-u —
 where held(pass) def-meeting-nom
 'Where was the meeting held?'

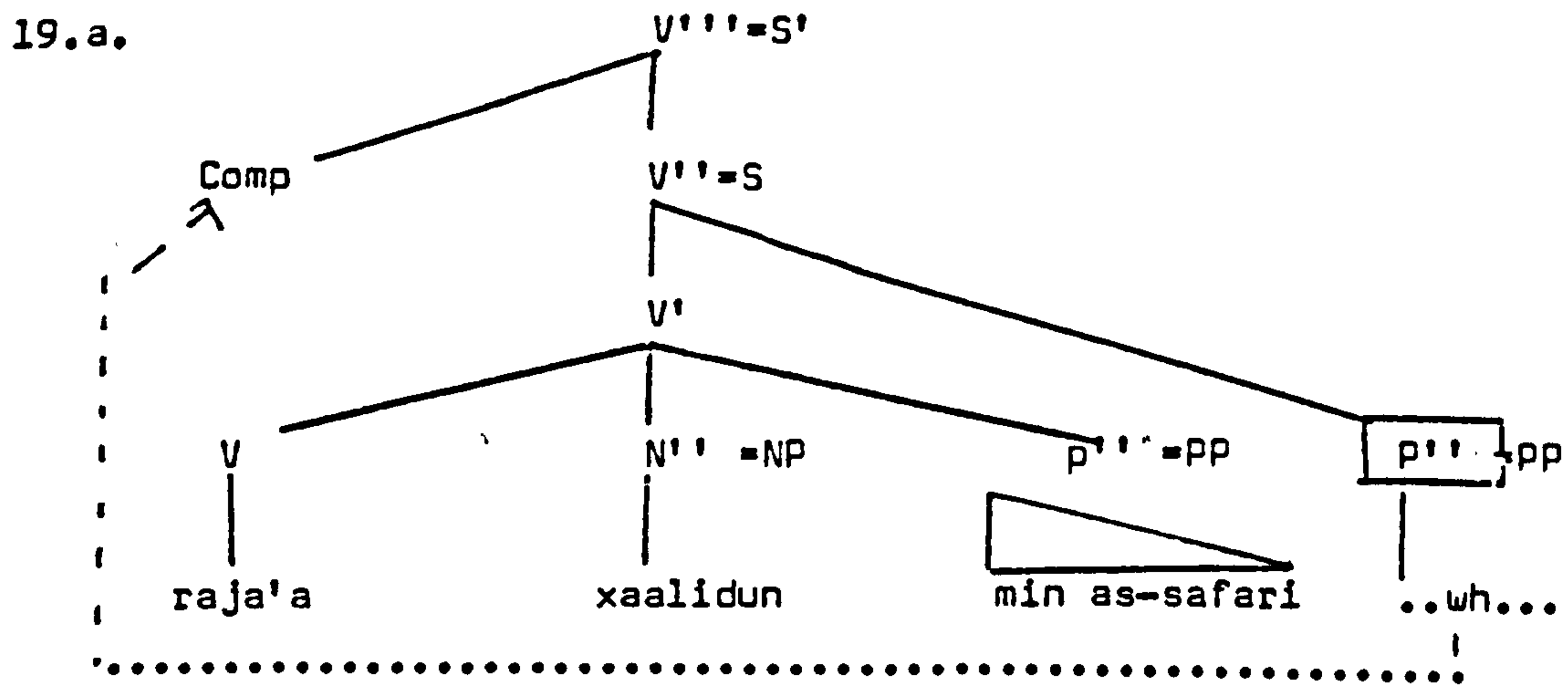
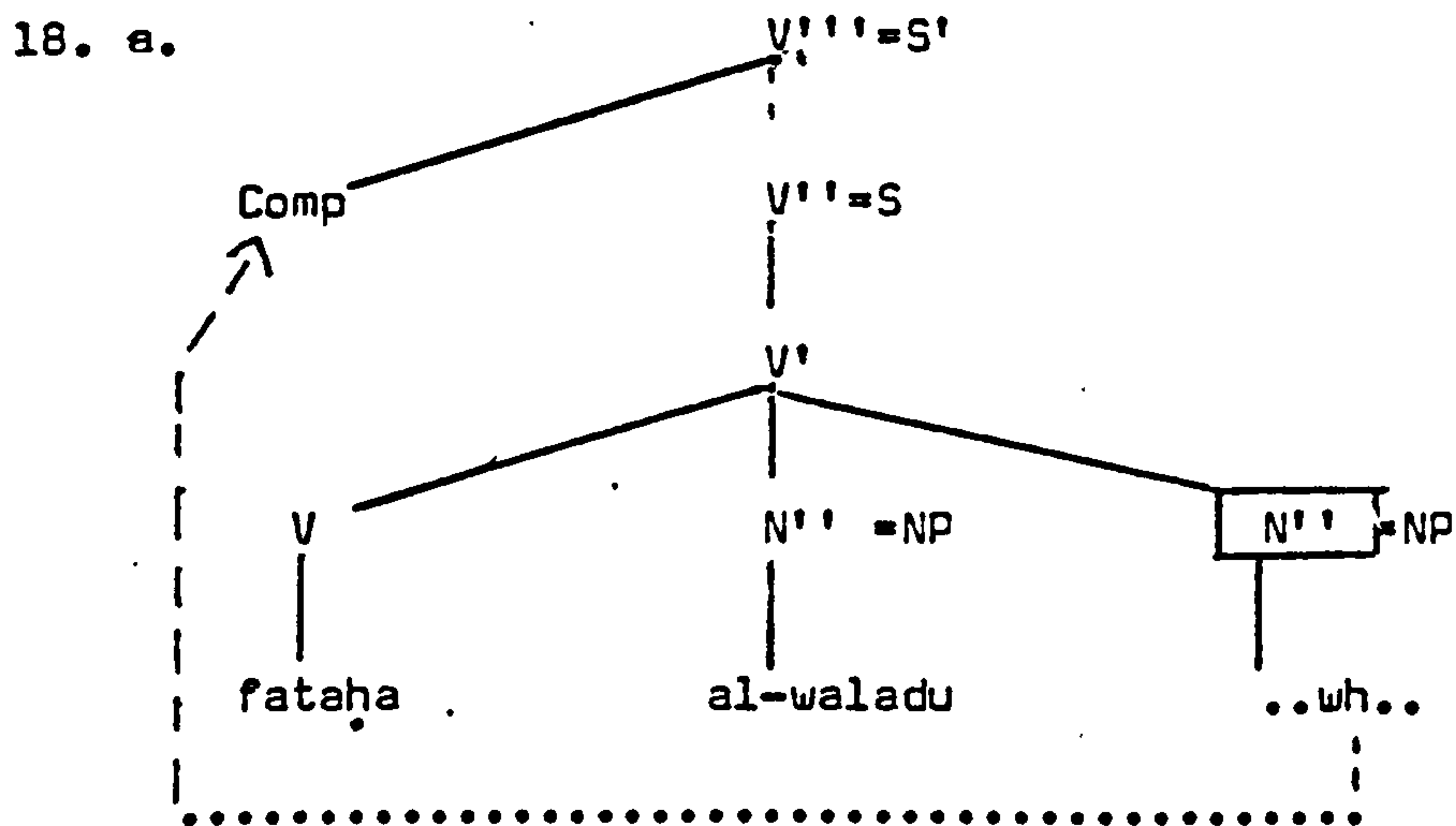
But Rule (11) which preposes constituents does not distinguish between constituents that are marked with the feature $[+wh]$ from those that are not. This rule amounts to Chomsky's (1977) rule $[\dots \text{move a } \dots]$ but not strictly equivalent to it since Chomsky's rule moves constituents in either direction. Incidentally, notice the similarity here between the two structures in English and Arabic; the Comp (lementisers) are either non-interrogative like that in English or ?an in Arabic, or interrogative like whether. In other words, the Comp, i.e. clause-introducing particles, in the sentence-formation rules generating the complement clauses, would be something like

$$\begin{array}{l} S' \longrightarrow \text{Comp} \text{ --- } S \\ \text{Comp} \longrightarrow \left[\begin{array}{c} + \\ - \end{array} WH \right] \end{array}$$

where $[+ WH]$ is the category of Interrogative Comp (under which whether

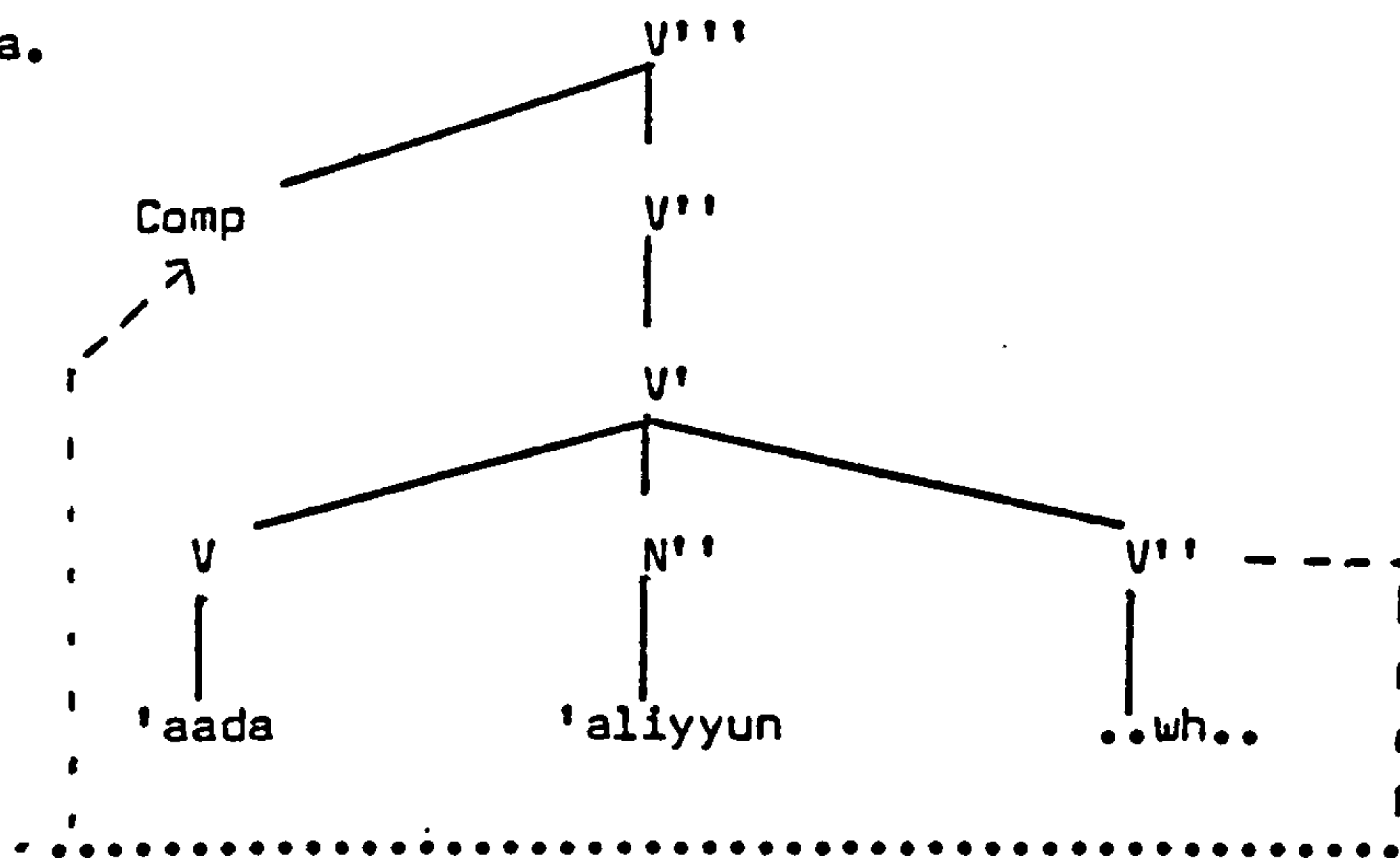
can be inserted), and $[-WH]$ is the category of Non-interrogative Comp (under which that would be inserted in a tensed clause, i.e. a verb or auxiliary inflected for tense), on the assumption that categories are complexes of syntactic features, and $[-^+WH]$ is one such syntactic feature.

Returning to the point under discussion, we can say that the appearance of wh-elements before the verb in Arabic is a result of the ^{obligatory} application of Rule (11) on their deep structures, as in the following phrase markers:

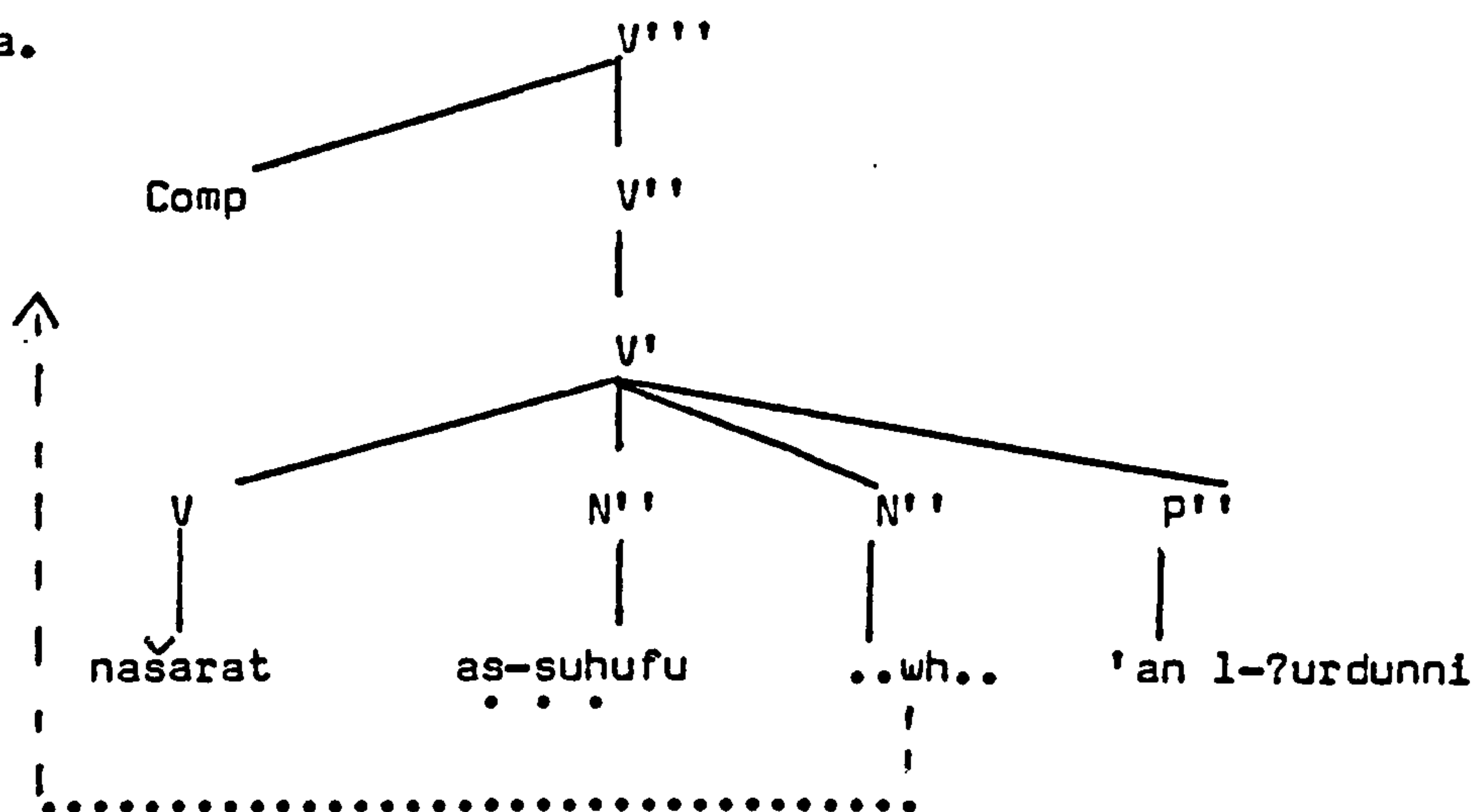


20.a.

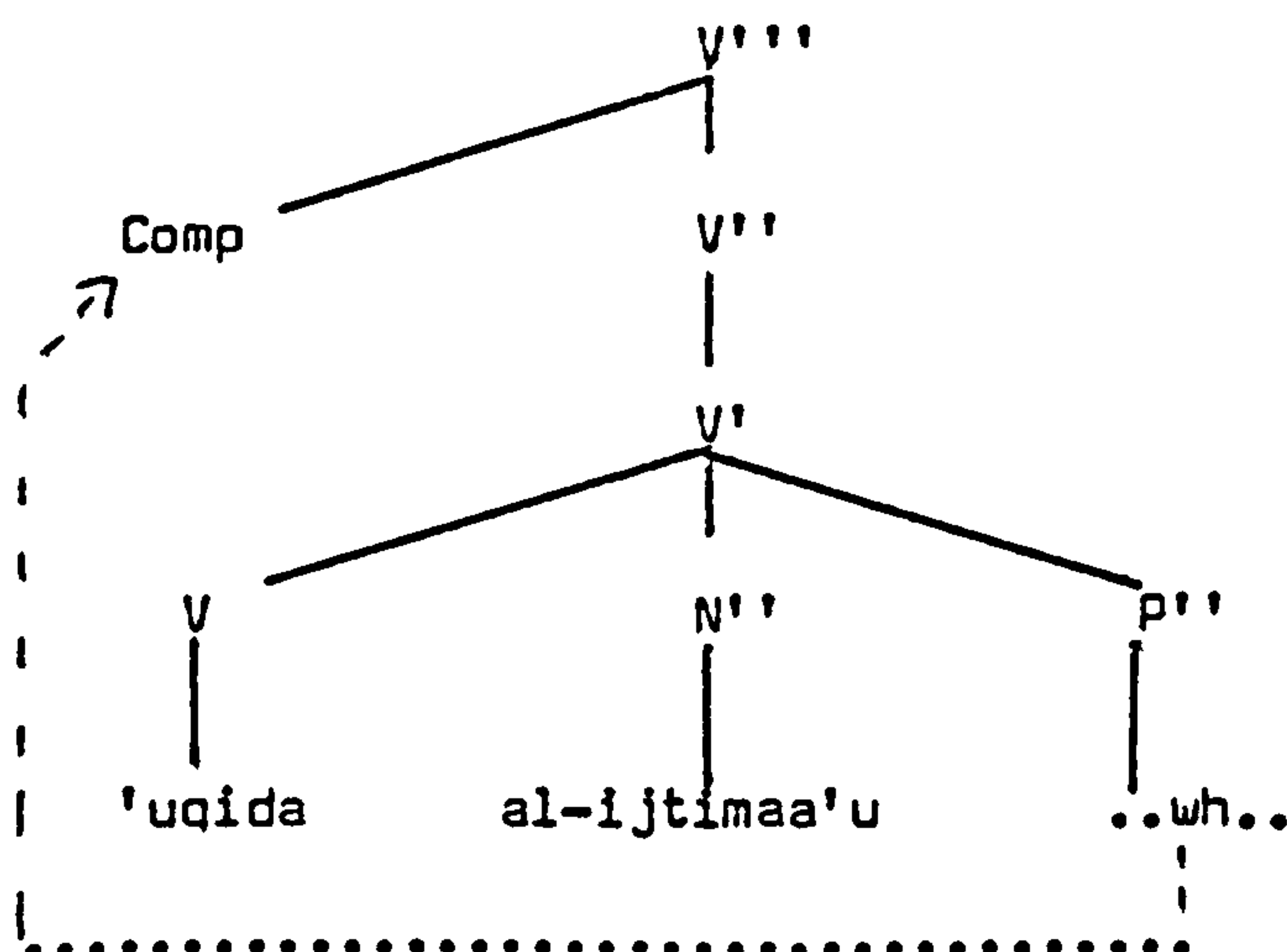
20.a.



21.a.



22.a.



We may raise the following question at this stage of discussion:

Why don't we treat the movement of all constituents, focused and those

marked with the feature [wh] in a unitary process? After all, rule (11) seems to produce all the grammatical sentences, and the ungrammatical ones result from structures that either do not meet the structural description of the rule, yet exhibit left-dislocation, or structures in which some syntactic constraints have been violated.

But the above question entails another question: What are the positions to which left-dislocated elements move? Or, more precisely, what is the derived structure produced by the application of rule (11)? As it stands, this rule does not assign any given node for these constituents to move into; what it says, rather, is that these constituents are left-dislocated. In other words, if we can assign a specific slot for constituents to move into, does it mean that all constituents will move into this same position? More specifically, Do wh-words and focused... constituents move into the same slot before the verb?

Chomsky provides an answer by saying that in order to achieve *internal explanatory significance*, a grammar (of English) must provide a principled account of why the NP, for example, moves into an empty NP-position, rather than into some other empty category position, and this we might do, says Chomsky, if we were to impose on all substitution rules the "Structure-Preserving Constraint", which says that a constituent can only be moved by a substitution rule into another category of the same type. This is to say that NP's can only be substituted by other NP's, PP's by PP's etc. Or, more generally, a given category X^n can only be substituted by another X^n . (Emonds, 1976, develops a universal typology of transformations, of which structure-preserving rules or transformations are a subset).

The above question regarding the specific slot raises another related question regarding the distributional properties of left-dislocated elements: Can they co-occur with wh-elements? This also raises the

question of subject left-dislocation in Arabic - a controversial issue between the two traditional schools of grammar-: Could a 'focused' subject be preposed to the left of the verb? In the sentences given so far none of these sentences exhibited subject left-dislocation, the dislocated NP's considered being object NP's. However, this process of subject-preposing will be investigated later on in this chapter, as a build-up to Topicalisation or Topic-Comment structures in Arabic, since the subject and Topic (of the topic-comment) show certain similarities in case and definiteness.

We may start by considering the first two points, the slot or place to which constituents are left-dislocated, and the co-occurrence properties between the left-dislocated elements.

We may recall that in a previous chapter we argued for more than one place for constituents to move into, and no attempt was made to specify which constituents co-occur with others and which do not. However, a partial account was given for the oddity of certain combinations in terms of acceptability. In other words, certain combinations were considered 'more-or-less acceptable' on functional rather than syntactic grounds. Let us consider some peculiar combinations.

3.2.2. Oddity of certain combinations and Peculiarity of certain phrases:

Considering the set of sentences below, we notice that a sentence with two preposed elements, one being a PP or an AdvP, and the other being an NP or a Participial Complement, is much more acceptable than a sentence where an NP and a Participial Complement are left-dislocated.

23. 'alaa at-ṭaawilat-i kitaab-an raʔay-tu
 PP NP V
 'I saw a book on the table'

24. ?amsi baakiyat-an qaabal-tu hind-an

Adv P Part Comp V

'I met Hind weeping yesterday'

25. ?amsi fii l-hadiiqat-i jalasa muhammad-un

Adv P PP V

'Muhammad sat in the garden yesterday'

26. ?ilaa l-mataar-i ḡadan sa-yasilu ar-raʔiis-u

PP Adv P V

'The President will arrive at the airport tomorrow'

27. ?? hind-an ḡaahik-an qaabala 'aliyy-un

NP Part Comp V

'Ali, laughing, met Hind'

28. ?? masruur-an hind-an ʔistaqbala muhammad-un

Part Comp NP V

'Muhammad, happily, received Hind'

Sentences (23-26) do not exhibit any oddity; they are acceptable and grammatical as well. The 'focused' constituent is the second of the two left-dislocated constituents, i.e. the one closer to the verb. The constituents 'alaa at-taawilat-i in (23), ?amsi in (24), ?amsi in (25), and ?ilaa l-mataari in (26) are taken to be part of the given information for both the speaker and the hearer. These sentences are appropriate

answers to the following questions:

23.a. 'alaat-taawilat-i maaḡaa raʔay-ta

'On the table, what did you see?'

24.a. ?amsi kayfa qaabal-ta hind-an

'Yesterday, How did you meet Hind?'

25.a. ?amsi ʔayna jalasa muhammad-un

'Yesterday, Where did Muhammad sit?'

26.a. ?ilaa al-matarr-i mataa sa-yasilu. ar-ra?iis-u

'At the airport, When will the President arrive?'

Such questions indicate that the new information is provided by those left-dislocated elements that are immediately before the verb.

On the other hand, the peculiarity of sentences (27 + 28) stems from the pragmatic consideration that it is 'hard' to imagine a discourse-situation where two elements are focused. It follows that 'even' sentences (23-26) should be odd as well. But this is not the case; they are fully acceptable. This phenomenon itself, i.e. that 'some' sentences are acceptable and other are not, supports the 'inaccuracy' of treating all sentences with two preposed elements in a unitary fashion. In other words, if Rule (11) were to apply, preposing all kinds of categories in an equal manner, then the functional considerations which cause the peculiarity of sentences (27 + 28) should apply to all combinations. (see PP. 143-44) for description of these sentences). But we have already seen that this is not the case when one of the fronted constituents is a PP or an Adv P. Notice also the oddity of (23 - 26) when both of the preposed constituents are emphasised by stress and intonation:

23.b.? 'alaa at-taawilat-i kitaab-an ra?ay-tu

24.b.? ?amsi baakiyat-an qaabal-tu hind-an

25.b.? ?amsi fil l-hadiiqat-i jalasa muhammad-un

26.b.? ?ilaa l-mataar-i qadan sa-yasilu ar-ra?iis-u

The peculiarity of these sentences, like that of sentences (27+28), is due to the functional constraint against focusing two constituents simultaneously. Whether PP's and Adv P's behave differently from other

constituents like NP's for example, is an open question; however, it is worth conjecturing about this issue.

We have already cited the pragmatic function of focusing that can be taken to support the distinction between PP's and Adv Ph's on the one hand, and other constituents on the other. This is to say that when a PP or an Adv Ph and another constituent cooccur before the verb, it is the constituent after the PP that is focused - the constituent closer to the verb - while the PP is taken as given information, as in (23b) and (24b).

Further support for such a distinction comes from the questions proposed for sentences (23-26). In these questions Adv Ph's and PP's precede the wh-words; but such wh-elements cannot be preceded by an NP or a Part Comp. Consider the following questions:

29.* al-ʔasada mataa raʔaa al-walad-u
 def-lion when saw def-boy-nom
 'When did the boy see the lion?'

30.* daahik-an ʔayna qaabala muhammad-un hind-an

It is interesting to note here that traditional Arab grammarians maintain that wh-words always assume a sentence-initial position and cannot be preceded by an element that originally belongs to the sentence that follows them. The reason for that lies in the fact that no regent that follows them can govern an operative that precedes them. However, this constraint seems to be relaxed with PP's and Adv Ph's, which allows them to occur before the wh-words. This is probably due to the fact that PP's and Adv Ph's are peripheral to the sentence nucleus.

Still in the realm of conjecture, we may assume that the appearance of PP's and Adv Ph's to the left of the focused elements in (23-26) and their appearance to the left of the wh-word in the corresponding questions (23a-26a) is part of the same process: a process peculiar to PP's and Adv Ph's by which they are fronted to the left of the complementiser.

In other words, if we assume that wh-movement is a movement of wh-words to Comp, the PP's and Adv Ph's fronting rule will move them to the left of the wh-word that occupies Comp. Notice here that the assumption that wh-words move into the Comp position is based on the complementary distribution of wh-words on the one hand, and the complementisers like ?an, and subordinate conjunctions like kay, hattaa, etc. on the other, as will be shown shortly.

Thus we could propose the following rule which would move PP's and AdvPh's to the left of the Comp:

$$\begin{array}{ccccccc}
 31. & \text{Comp} & V & X' & Z & & \\
 & 1 & 2 & 3 & 4 & \longrightarrow & 3 \ 1 \ 2 \ t \ 4 \\
 & & & & & & \text{where } X = \text{PP or Adv}
 \end{array}$$

The condition on the rule is not very elegant. Another possibility would be to treat Adv's as having some underlying preposition that is deleted. This alternative solution is not available in the framework I am using, where all the morphology is handled in the lexicon, because the adverb masaa?an 'in the evening', for example, has an accusative case suffix but the corresponding prepositional phrase fi l-masaa?i 'in the evening' contains a noun with a genitive case suffix. It would not be a case of simply deleting the preposition; the case suffix would have to be changed as well, but the case suffixes are handled only in the lexicon, not in the transformational component.

An alternative proposal to the above rule that moves the Adverbial and Prepositional phrases to the left of the Comp is to generate these phrases in the base, to the left of the

Comp, thus rendering rule (1) of the PS-rules as follows:

$$32. \quad S' \longrightarrow (P'') \text{ Comp } \left\{ \begin{matrix} S \\ S', \end{matrix} \right\}$$

(cf. Bakir, 1979)

As I mentioned earlier, this discrepancy in the syntactic behaviour of Adv Ph's and PP's will be left open for research. In fact, this is another area amongst the innumerable areas of controversy between the Basris and the Kufis (cf. Al-ʔanbaari, Vol.2).

Returning to the second question of co-occurrence that constituents of other syntactic categories show in structures with left-dislocated constituents, we could say that the wh-words and left-dislocated NP's and Participial Complements cannot co-occur to the left of the verb. We mentioned some examples, rejected by Arab grammarians, of sentences with wh-words followed by an NP followed by the verb. Consider the following sentences:

33.* ʔayna al-kitaab-a wada'a muḥammad-un

WH - NP V

where def-book-acc put Muhammad-nom

'Where did Muhammad put the book ?'

34.* maa^haa hind-an ?a'taa fu?aad-un

what Hind-acc gave Fuad-nom

'What did Fuad give Hind?'

35.* mataa daahik-an ra?at hind-un 'aliyy-an

when laughing-acc saw Hind-nom Ali-acc

'When did Hind see Ali laughing?'

36.* man raakibat-an qaabalat hind-un

who riding-acc met Hind-nom

'Who did Hind, riding, meet?'

The above sentences are asterisked as ungrammatical, and their ungrammaticality is due to the 'existence' of a focused left-dislocated NP- al-kitaaba in (33) and hindan in (34) - or a Participial Complement - daahikan in (35) and raakibatan in (36) - together with the wh-words, the latter being sentence-initial. Notice, on the other hand, the grammaticality of such sentences without these focused left-dislocated elements:

33.a. ?ayna wada'a muhammad-un al-kitaab-a

'Where did Muhammad put the book?'

34.a. maa^haa ?a'taa fu?aad-un hind-an

'What did Fuad give Hind?'

35.a. mataa ra?at hind-un 'aliyy-an daahik-an

'When did Hind see Ali laughing?'

36.a. man qaabalat hind-un raakibat-an

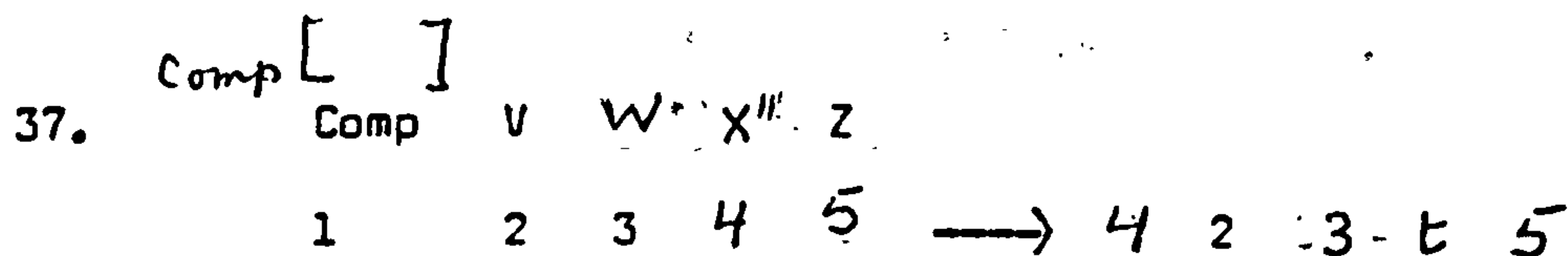
'Who(m) did Hind, riding, meet?'

We may ask the following question then: What is it that blocks the application of the rule of left-dislocation or focusing of constituents when wh-words are present sentence-initially, assuming that wh-words move

to Comp? Two alternative 'solutions' offer themselves: (1) Either we consider both wh-movement and left-dislocation of constituents as one and the same process, or (2) they are two separate and distinct processes. I shall discuss the details of each alternative in the following pages.

3.2.3. WH-Movement and Left-Dislocation as One Process

Let us assume that all constituents, whether [+wh], can move outside the domain of S into the Comp position. We may then formulate the following rule to account for this movement:



Notice here the absence of position (1); this is to say that once a constituent is moved into Comp, it first leaves a trace (t) to mark the position it has moved from (cf. Chomsky, 1977) and second this constituent 'fills' the Comp position, thus leaving no empty 'slot' for another constituent to move into. But is there any support for this claim?

Considering subordinate clauses beginning with the Complementiser ?an or one of the subordinate conjunctions kay, hattaa, etc., which are Comp fillers, we can find the support needed for the above claim. In such subordinate clauses beginning with a Comp or a Comp filler, NP's and Participial Complements, and even PP's and Adv P's cannot be left-dislocated. Consider the following sentences:

38. rafadat ?amriikaa ?an yafriḍa majlisu l-?amni 'uquubaatin 'alaa
V NP Comp V NP NP PP
refused America that impose the Security Council sanctions on
?israa?iil
Israel

*b. rafadat ?amriikaa ?an 'uquubaatin yafrida majlisu l-?amni 'alaa
NP V

?israa?iil

*c. rafadat ?amriikaa ?an 'alaa ?israa?iil yafrida majlisu l-?amni 'uquubaatin
PP V

"America refused that the Security Council impose any sanctions on
Israel"

39.a. ?a'malu bijiddin kay ?unhiya ar-risaalat-a mubakkir-an
Comp V NP Adv

work-I hard that finish-I def-dissertation-acc early

*b. ?a'malu bijiddin kay ar-risaalat-a ?unhiya mubakkiran
NP V

*c. ?a'malu bijiddin kay mubakkiran ?unhiya ar-risaalat-a
Adv V

"I work hard in order to finish the dissertation early"

40.a. du'ii-tu hattaa ?araa taahir-an mutaxarrij-an
Comp V NP Part-Comp

invited(pass)-I that see-I Taher-acc graduating-acc

*b. du'ii-tu hattaa mutaxarrij-an ?araa taahir-an
Part Comp V

*c. du'ii-tu hattaa taahir-an ?araa mutaxarrij-an
NP V

"I was invited to see Taher graduating"

However, such a 'unitary' process of left-dislocation will automatically render sentences (27) and (28) as ungrammatical, since two constituents occupy the position for one in Comp, a case similar to that of sentences (38b+c) (39b+c) and (40b+c), which are judged as ungrammatical. Yet, it is worth recalling that the marginality of

sentences (27) and (28) was based on functional, rather than syntactic, constraints, i.e. of focusing two constituents simultaneously.

Sentences (38b+c), (39b+c), and (40b+c), that exhibit left-dislocation in the presence of a complementiser, and sentences (33-36), which exhibit left-dislocation in the presence of wh-words, are all judged as ungrammatical and rejected by most Arab grammarians. Recall also the traditional stand regarding the wh-words assuming sentence-initial position and the tolerance of PP's and Adv P's.

Another drawback of this unitary treatment of wh- and left-dislocation can be seen in Rule (37) itself: this rule will yield such ungrammatical sentences as (42a), if the object NP is left-dislocated instead of the wh-word: (Notice that left-dislocation does not apply in subordinate clauses; thus, we cannot have (41a) from (41):

41. talab-tu ?an yuhdira muhammad-un ?abaa-hu
 asked-I that bring Muhammad-nom father-his
 'I demanded that Muhammad bring his father'

* 41.a. talab-tu ?abaa-hu ?an yuhdira muhammad-un

(See pp. for further discussion).

42. $\left[S' \left[\text{Comp} \right] S \left[\text{zaara al-wafd-u al-batraa?-a} \left[\text{mataa} \right] \right] \right]$
 visited def-delegation-nom def-Petra-acc when

*a. $\left[S' \left[\text{Comp} \text{ al-batraa?a} \right] \left[S \text{ zaara al-wafd-u} \left[t \right] \text{ mataa} \right] \right]$

The reason for this is that the Comp is filled by the NP al-batraa?a with the first application of the rule. The Comp in

Rule (37) has to be empty. Thus, the

rule will not apply on (42a) to produce (42b):

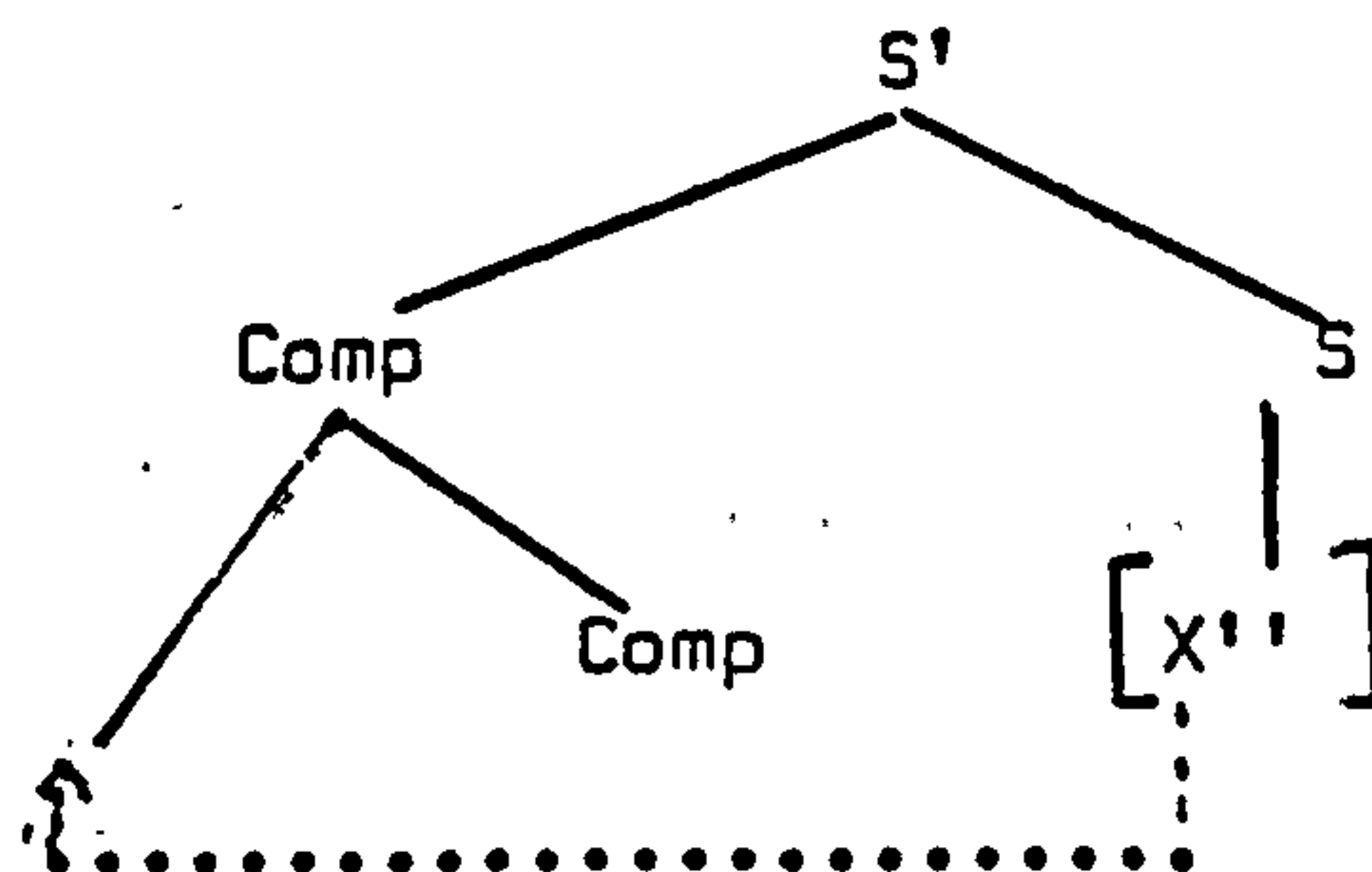
42 *b. mataa albatraa?a zaara alwafdu

Notice that (42a) is not grammatical for the same reason we mentioned earlier, i.e. that wh-words must assume sentence-initial position in Arabic. It follows that the rule must select the wh-word and left-dislocate it so that the result is grammatical, as in (42c):

42 c. mataa zaara al-wafd-u al-batraa?-a
when visited def-delegation-nom def-Petra-acc
'When did the delegation visit Petra?'

However, one may reject this kind of reasoning: one could say that the movement to Comp is that of substitution, i.e. replacement of lexical formatives that are generated under the Comp node if complementisers are introduced transformationally (cf. Emonds 1976), as opposed to being base-generated as in Chomsky & Lasnik (1977). Adopting the substitution approach, it follows that there is only one 'slot' into which constituents can move and hence the ungrammaticality of sentences with two left-dislocated constituents can be predicted. Alternatively, one could say that the movement to Comp is one of 'adjunction' that sister-adjoins constituents to the Comp as shown on page (105) or as represented below:

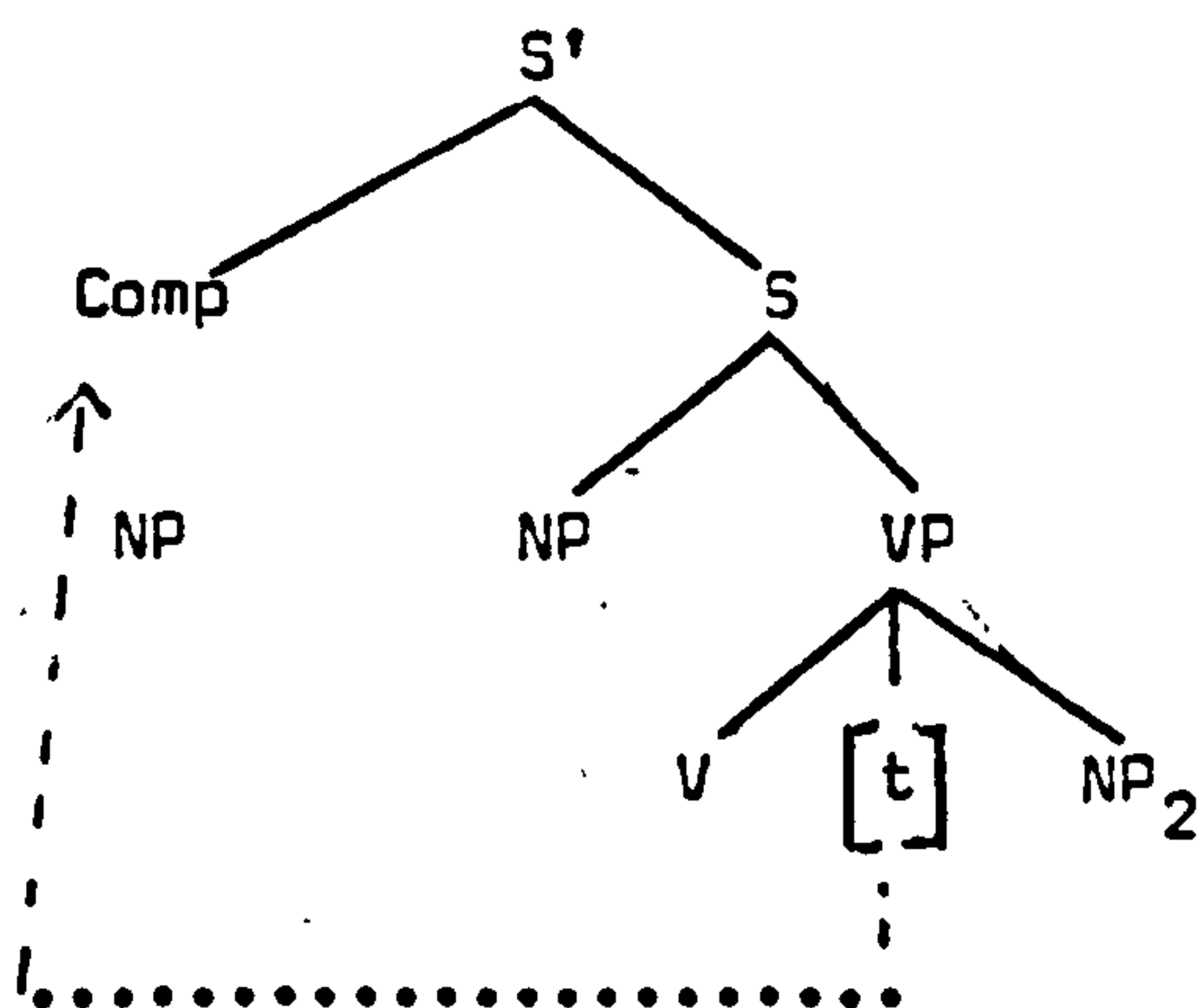
43.



Under this adjunction hypothesis there will be no restriction regarding

the number of elements that can move to Comp. It follows that one cannot argue for the availability of an empty 'slot' into which constituents move unless one argues against the adjunction hypothesis. In other words, if we can establish, strongly and convincingly, that the movement to Comp is one of substitution of the complementiser, then we can maintain that there is only one position available in Comp for constituents to move into, and thus the ungrammaticality of left-dislocating two constituents. But this will not, however, explain the marginality of some sentences that exhibit 'double' left-dislocation. Now, if adjunction is to be found equally plausible, then we will have to face the unfortunate consequence of admitting all sentences with two left-dislocated elements. It is worth noting here that Chomsky (1978) restricts this adjunction to one element only. This is due to the fact that the antecedent should c-command its anaphor. We may recall that a constituent X is said to c-command another constituent Y if the first branching node dominating X dominates Y, and X does not dominate Y, nor Y, X. Thus, double adjunction becomes impossible because of this requirement on bound anaphora. For example, in a structure like

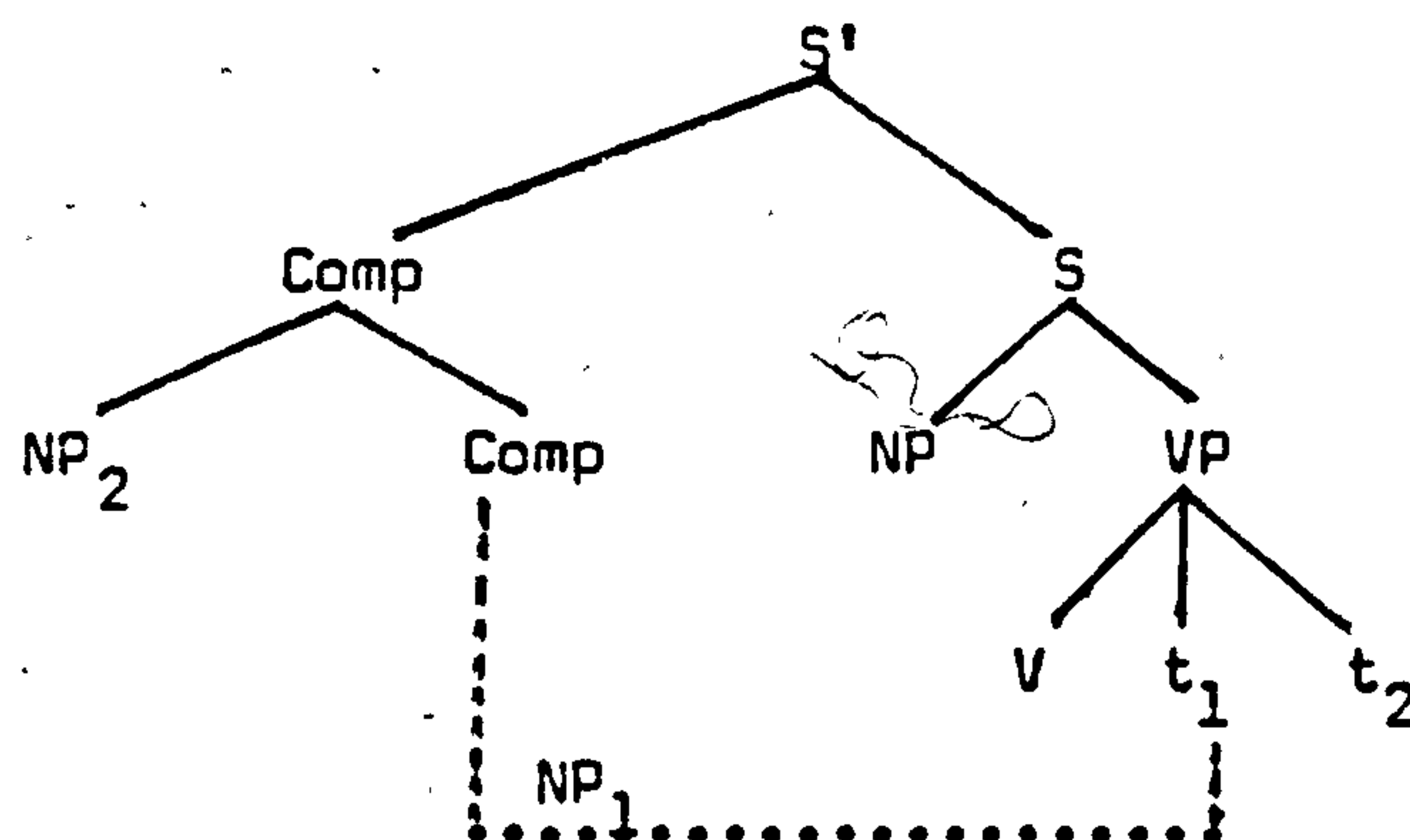
44.



the NP moves to Comp and leaves a trace behind. This NP c-commands its trace.

However, if NP_2 is moved to Comp as in

45.



then NP_1 no longer c-commands its trace t_1 . But, if such a requirement on binding is proved not to be necessary between the antecedent and its trace, there will be no grounds to restrict the adjunction to one element only, as Chomsky maintains. We will return to this point later on.

What I have been trying to say is this: we have two proposals: substitution, whereby only one constituent can be moved to Comp position, and adjunction, whereby two constituents can be left-dislocated. In what follows, I discuss each proposal and attempt to choose one on the basis of data.

3.2.4. Adjunction & Substitution:

Under the adjunction hypothesis, a wh-phrase is adjoined next to the complementiser. Support for this stance comes from wh-questions and wh-relative clauses in English, i.e. clauses including wh-relative pronouns like who and which in modern English.

Under the substitution hypothesis, on the other hand, a wh-phrase will move to the Comp position, thus occupying the position normally occupied by the complementiser, thus ~~replacing~~ the complementiser.

It is not plausible, therefore, to prefer one hypothesis to the other unless convincing evidence is found, which will help us choose for one proposal rather than the other.

One possible relative clause structure in Middle English, and wh-interrogatives in other languages, are usually used by linguists to give support to the adjunction hypothesis; this means that wh-phrases are adjoined to the left of the complementiser. Consider the following examples (Radford 1981):

46. (a) a man who that he knew well (Middle English)

WH COMP

(b) Ou que tu vas ? (Popular French)

where that you go ('Where are you going?')

WH COMP

(c) M'amn lli hdarti ? (Colloquial Moroccan Arabic)

with-whom that you-spoke ('Who did you speak with/to ?')

WH COMP

(Notice that (46c) was categorically rejected by a Moroccan student: he denied the existence of lli in Colloquial Moroccan. A Tunisian student concurred with the first and rejected, even denied it).

(d) che belle gambe che hai (Italian)

what pretty legs that you-have ('What pretty legs you have!')

WH COMP

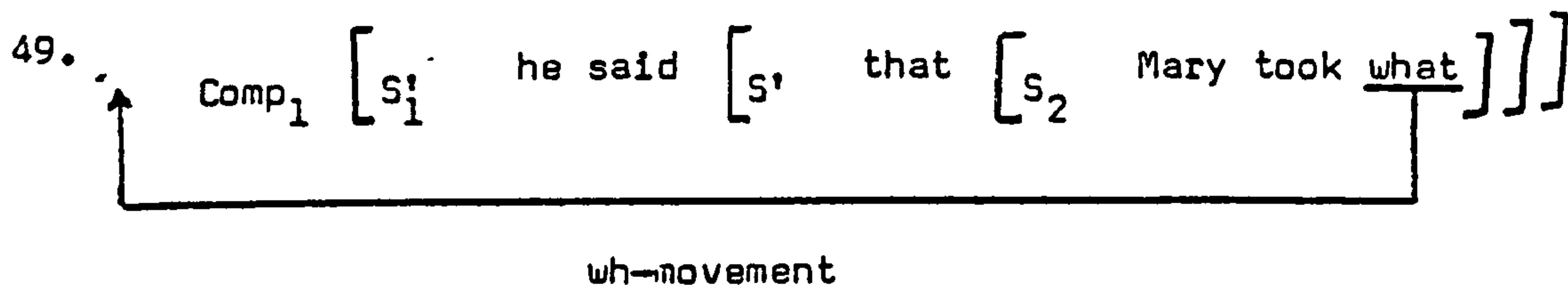
This led Chomsky (1977) to generalise the wh-movement from Modern English to other languages. He states the adjunction hypothesis in the following manner:

47. the rule 'move wh-phrase' places the wh-phrase in the Comp position, to the left of the complementiser.

Chomsky's preference of adjunction to substitution was motivated on certain requirements in his model, namely that movement is successive-cyclic. This is to say that in a sentence like

48. What did he say that Mary took — ?

is derived from



Such an analysis will violate the Subjacency Condition, since the moved element, the wh-phrase here, crosses two bounding nodes, S_1 and

S_2 . Chomsky goes on to say that there is an alternative way of deriving

(48) from the same underlying structure, without violating Subjacency.

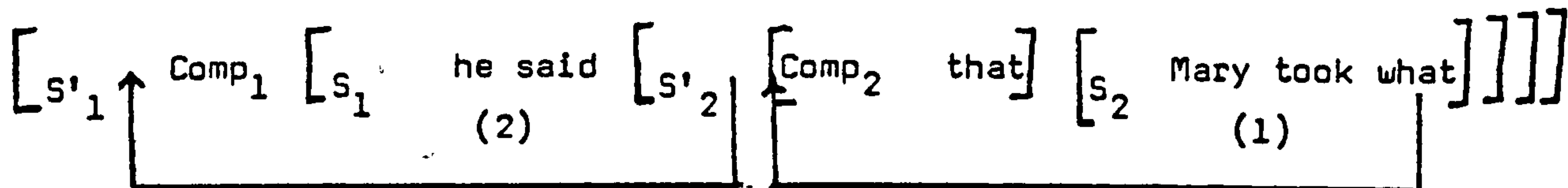
Recalling that wh-movement in its general form says "move wh-phrase", and given the supposedly universal conditions on the way movement rules apply, this amounts to "Chomsky- adjoin wh-phrase to the left of Comp".

Radford (1981), adopting the 'same' line of analysis, yet in a slightly different fashion, has the following to say:

We assumed that what could be moved to the Comp of the matrix clause if wh-movement applied in such a way as to adjoin what directly, i.e. in a single movement, to the Comp of the main clause. But to "Chomsky-adjoin wh-phrase to the left of Comp" would also be equally plausible with an alternative derivation for sentence (48), on which what was first adjoined to the subordinate clause Comp by one application of wh-movement, and then moved to be adjoined to the Comp of the matrix clause

by a second application of the same rule of wh-movement, as in the following representation:

50.



Under this analysis (the argument is Radford's) what is adjoined to the Comp of the subordinate clause on the S_2 cycle, and then moves from there to be adjoined to the Comp of the matrix clause on the S'_1 cycle; i.e.

what moves from the intermediate Comp to the main Comp on successive cycles, and this is known as the Comp-to-Comp analysis of wh-movement.

Neither of these two movements of what here violates Subjacency; on the first movement what goes out of S_2 , allowed by subjacency which permits movement out of one S-node; on the second movement what moves out of S'_2 and S_1 , and this does not violate subjacency, since only one bounding node has been crossed (cf. Radford 1981).

What can be gathered from Chomsky's argument and Radford's defense of that argument is that there is a two-place Comp into which two constituents can be moved (cf. sentence 46 a-d). Factual considerations support the adjunction hypothesis, or a two-place comp. Although the examples under (46) show that there are languages which allow structures in which a wh-phrase appears to the left of a complementiser, it is the facts of Arabic syntax that are important here. Following Bresnan (1976) and Bresnan and Grimshaw (1978), Bakir (1979) dispenses with a two-place Comp and shows that the relevant Arabic construction can be handled

by unbounded transformations. The wh-element moves in one step from its place in the embedded clause to the Comp of the matrix clause. A process of co-indexing will follow this movement, which will index all Comp's with the index of the wh-word, successively. If the trace left by the wh-word is not separated from the nearest Comp that is co-indexed with the wh-word by a cyclic node like S', NP, or PP, the sentence is grammatical and receives a proper semantic interpretation.

Subjacency is seen now as a condition on co-indexing, not on movement, and the violation of subjacency results in ungrammaticality and ill-formedness. It follows that the complementiser that in sentence (49) is available for such indexing; it can receive the indexing of the wh-word that is in the Comp of the higher clause. This leads to the conclusion that the movement of wh-words into Comp is one of substitution for the complementiser, if the substitution model is adopted. I shall return to this point shortly, when I project this discussion on the Arabic data.

To recapitulate, I started discussion of left-dislocation of wh-elements by raising two points: the place to which constituents are left-dislocated and the co-occurrence properties between left-dislocated elements. I tried to show that left-dislocated elements go to Comp on the grounds whether the movement to Comp is one of adjunction or substitution to the complementiser. We saw that some sentences exhibit two left-dislocated elements, which is in favour of the adjunction hypothesis. This led to the discussion of adjunction and substitution. There was an implicit trend on my behalf towards adopting the substitution proposal, in order to handle traces.

In this section, I project more data in order to clarify the co-occurrence properties and to substantiate the substitution proposal.

Arabic Data:

Arabic data does not support the adjunction hypothesis. To start with, complementisers and wh-words do not co-occur. Consider the following sentences:

51.a.* saʔal-tu-hu s, [ʔan mataa yazuura-naa]

asked-I-him that when visit-us

Comp wh

'I asked him when he will visit us'

(Notice that the structure of embedded (indirect) questions is identical with the structure of direct questions).

b.* saʔal-tu-hu s' [mataa ?an yazuura-naa] ... —
 wh comp

52.a.* ṣahaba muḥammad-un S' [kay ?ayna yaraa al-ḥaflat-a]
went Muhammad-nom that where see def-party-acc

Comp Wh

'Where did Muhammad go to see the party?'

[illegible]

The ungrammaticality of the above sentences is due to the inadmissible co-occurrence of a wh-word and a complementiser. This suggests that the movement to the comp position is one of substitution where the left-dislocated element substitutes or replaces the bundle of features that might have been generated under the Comp node, and which would be realised later as a complementiser instead of being adjoined to the left of it. This means that only one constituent can be left-dislocated to Comp under the unitary hypothesis (see p. 119), and

consequently the 'fronting' of two constituents is blocked. As we saw earlier, some sentences that show this are ungrammatical (33-36) while others (23-26) and to a lesser extent (27 + 28), are not. The marginality of such sentences, still unexplained, will suffice to make us depart from a unitary treatment of all-constituents-to-Comp, and look for another analysis that will distinguish between the movement of wh-phrases from that of left-dislocated or fronted elements in order to account for the distributional discrepancies between left-dislocated elements.

3.2.5. Left-Dislocation and WH-Movement as Two Separate Processes

We may start by separating the wh-movement from left-dislocation or 'fronting, focusing' so that we can account for the co-occurrence discrepancies of wh-elements, NP's and Participial Complements. Establishing these two movement processes as distinct will help us explain the ungrammaticality of sentences like (33-36) in terms of one process blocking the other.

Accordingly, we may formulate the following rule that would move wh-phrases to the Comp position:

53.	Comp	W	X' ' [.wh.]	(Obligatory)
	1	2	3	3 2 t
			---->	

Simple sentences in which question words do not occur in first position are incorrect. In the Standard model this fact would be dealt with by making Rule (53) obligatory. In the Revised Extended Standard Theory all transformations are optional and a surface filter is required that marks as ungrammatical simple sentences in which question words are not in first position.

This rule (53) states that only major categories that have a wh-element in their domain can undergo such movement. It will not account for left-dislocation of fronted constituents (which will be accounted for by a different process). This means that there would be no way in which we can have two fronted elements under such a rule. Thus, sentences like (27) and (28) should be totally rejected, since there is no empty node left for the second element to move into, after the first has

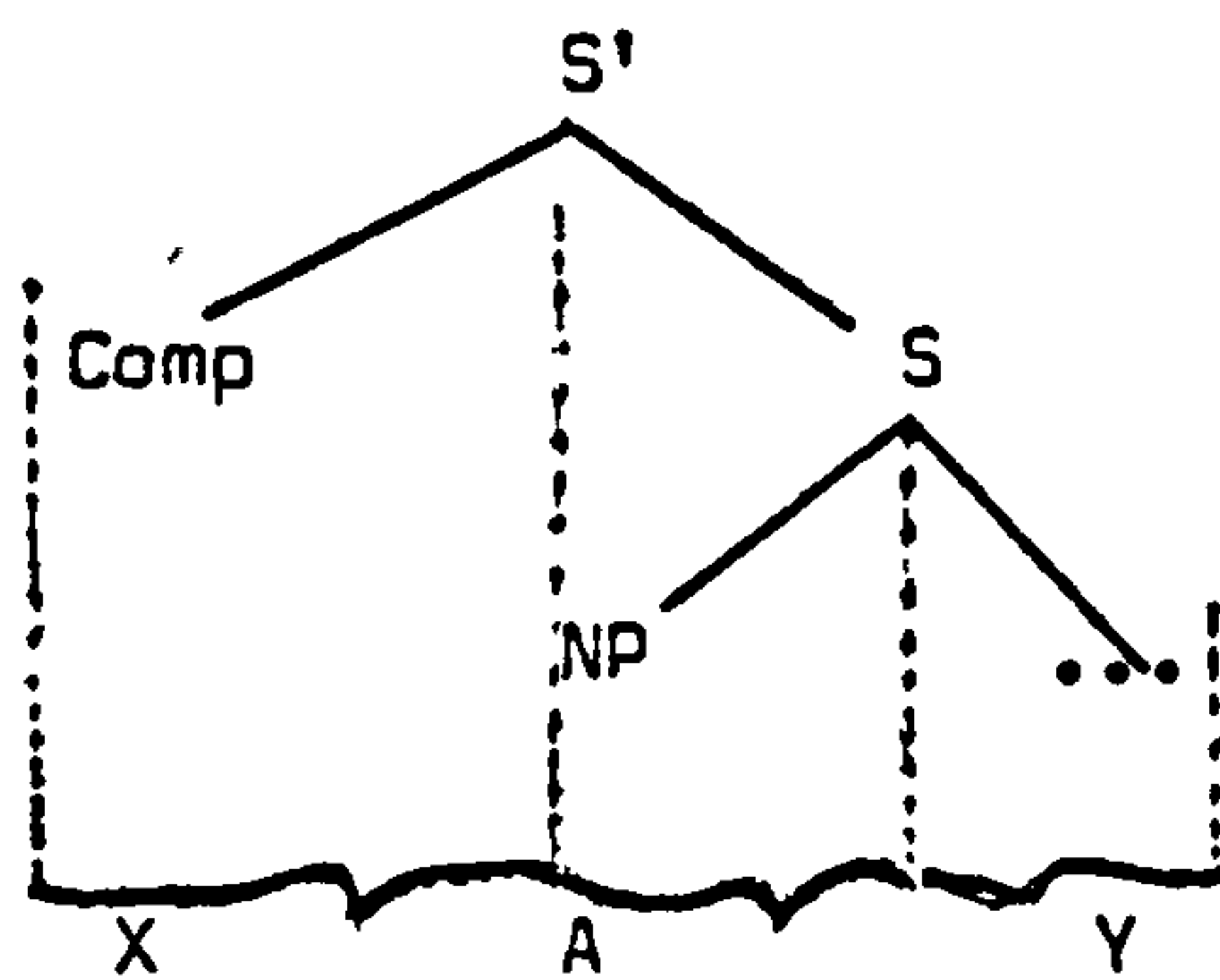
occupied the only slot available by the PS-rules. But these sentences are not totally rejected as ungrammatical; rather, they are questionable as 'acceptable'. In other words, the 'peculiarity' of such sentences is due to pragmatic rather than syntactic considerations. It follows that adjunction is the plausible solution, whereby the fronted element will be sister-adjoined to the verb (see p. 105). This means that rule (11) can be modified as follows:

54. V W X' Y
 1 2 3 4 → 3+1 2 t 4

Accordingly, we can distinguish between the wh-elements and left-dislocated constituents by two different processes: one which will move the wh-element to Comp (rule 53) and the other which will sister-adjoin the left-dislocated constituent to the verb (rule 54). If so, what is it then that the ungrammaticality of sentences (33-36) is due to?

Some linguists working within the EST have noticed that the 'filling' of the Comp node may block the application of transformations that involve elements and positions adjacent to Comp. Joan Bresnan (1977), discussing constraints on variables, distinguishes between variable factors and constant factors of the proper analysis of a structure in relation to a transformation. A variable factor corresponds to a variable in the transformation and a constant factor to a constant. A proper analysis of a structure S with respect to a transformation T is a factorisation $(p_1 \dots p_n)$ of S which satisfies the structural condition of T on which the transformational mapping, i.e. structural change of T is defined. Thus, in the diagram below, X and Y are variable factors and A is a constant factor:

55.



She goes on to formulate the Complementiser Constraint on Variables as follows:

56. Bresnan (17) The Complementiser Constraint On Variables

For any proper analysis (...X,A,Y,...) such
that X and Y are variable factors and A is
a constant factor to be deleted, if
X=... Comp, then ... must be empty (of
terminals).

(Bresnan: p.173)

What the constraint says is that X can contain a Comp only if it contains nothing else, a condition that allows X to function as an 'end variable' when a transformation applies on S'. It is worth noting here that Bresnan's constraint involves rules of deletion. In other words, what the constraint essentially says is that in a rule involving the deletion of [A] in [...X,A,Y,...], A cannot delete where X=Z-Comp if $Z \neq \emptyset$; i.e. if Comp dominates any terminal elements. Stretched into a broader - and more humane -sense, the constraint amounts to saying that the application of wh-movement rule, where wh-words are 'Comp fillers', will block the application of left-dislocation or fronting of constituents;

i.e. the presence of the complementiser would break the adjacency tie between the filled Comp and the verb. This means that the ungrammaticality of some sentences like (33-36) is a result of violating this tie. The blocking of the movement of constituents in embedded clauses beginning with complementisers or other subordinate conjunctions, as in (38-40), can also be seen as being caused by the fact that the Comp slot is filled, which will block the left-dislocation rule. It is worth noting also that Arab grammarians do not allow anything to come between the complementiser and the following verb in sentences preceded by complementisers, although they relax this constraint with ?in, where they tolerate the separation of ?in from the following verb by a PP. This is peculiar to conditional sentences in Arabic. But, What is a Conditional sentence in Arabic?

Conditional sentences are composed of two sentences, the "sentence of the condition" and that "of the answer". This is parallel with the English subordinate and main clauses, respectively. In their treatment of conditional sentences, Arab grammarians deal with the preposing of elements to the left and right of the complementiser ?in "if" and its "sisters", and such complementisers being always in sentence-initial position. The two traditional schools, in their controversy about style and their interest in rhetoric, differ as to whether the main clause or subordinate clause is first in order; the Kufis believe that the main clause comes first, while most of the Basris advocate the converse, i.e. that the subordinate clause is first or original. Notice here the word original or originally which can be rendered as underlying or underlyingly in modern linguistic terminology.

As for the movement and left-dislocation of constituents from

either of the two clauses, both schools agree that a constituent cannot move out of the subordinate clause to the left of the conditional complementiser, as in (57a):

57. ?in tu'ti-nii kitaab-a-ka ?u'tii-ka kitaab-ii
 if you-give-me book-acc-your I-give-you book-my
 a.* kitaab-a-ka ?in tu'ti-nii ?u'tii-ka kitaab-ii
 'If you give me your book, I give you my book'

But if the constituent "kitaab" above, moves to a position immediately to the right of ?in, such movement is blocked, although with 'some' exception as in (b):

- b.* ?in kitaab-a-ka tu'ti-nii ?u'tii-ka kitaab-ii

Yet, these grammarians agree that an element can be moved from the main clause, which normally comes second on the surface, to the left of the main clause, i.e. left-dislocated, as in (c):

- c. ?in tu'ti-nii kitaab-a-ka kitaab-ii ?u'tii-ka

The Kufis allow the movement of constituents to the left of the complementiser, as in (d):

- d. kitaab-ii ?in tu'ti-nii kitaab-a-ka ?u'tii-ka

So much for the Arab grammarians' view of conditional sentences.

We return to the previous point, namely that conditional clauses introduced by ?in and other similar complementisers do not allow

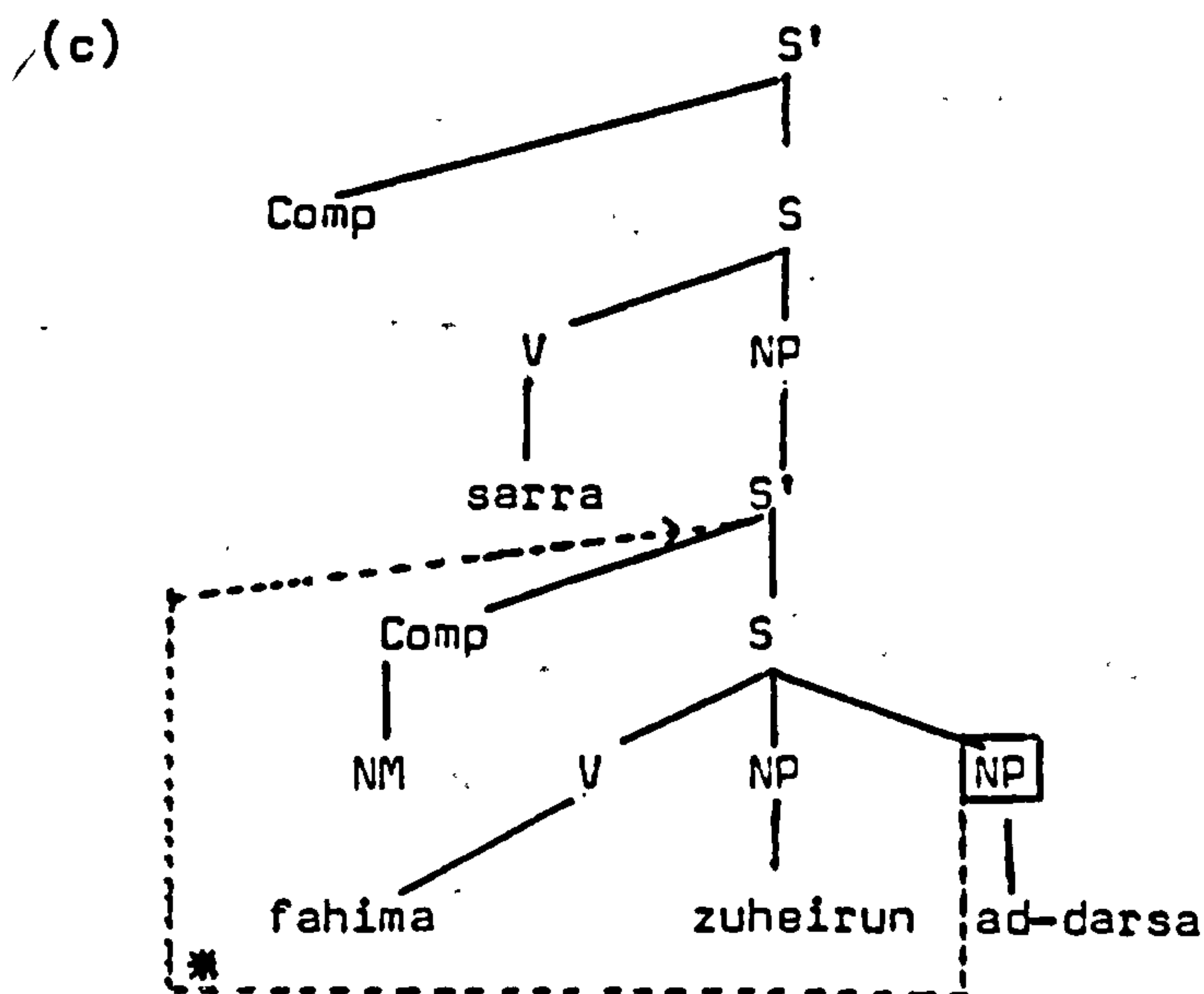
constituents to intervene between the complementiser and the verb;

notice the inadmissibility of (57a + b). By contrast, notice the grammaticality of structures like (57c) where preposing from the main clause is permitted.

Accordingly, we can explain the ungrammaticality of sentences with wh-words and left-dislocated constituents on the one hand, and the ungrammaticality of sentences that begin with a complementiser and show preposing of constituents on the other: the two phenomena are ascribed to the same reason; the violation of "No Complementiser Condition" (Goldsmith 1978). Strikingly enough, the same condition will also explain the inadmissibility of left-dislocation within structures; consider the following sentence (previously sentence 15):

58. (a) sarra-nii fahm-u zuheir-in ad-dars-a
pleased-me understanding-nom Zuheir-gen def-lesson-acc
*(b) sarra-nii ad-darsa fahm-u zuheir-in
'Zuheir's understanding of the lesson pleased me'

This is a nominalisation structure, and nominalisation structures were assumed to have the structure of S' (see Chapter IV for discussion of X-bar). The Comp of S' in these structures is filled with the morphological Nominalisation Marker (NM), thus blocking the left-dislocation of constituents. This is illustrated in (58c) below: (cf. Bakir 1979)



(However, see page 105 for a different treatment of the above sentence).

To recapitulate, I have discussed two alternative proposals, one dealing with the movement of wh-elements and the other with left-dislocation. Left-dislocation will allow two constituents to be left-dislocated and occupy a single slot with the resulting marginality.

To elaborate, we may go back to the marginal sentences (27) and (28) where two constituents have been preposed, and sentences like (33 - 36) where a constituent has been preposed to the left of the verb following a sentence - initial wh-word. I shall opt for this proposal, i.e. the wh-movement, on certain grounds.

Recall that constituents move into Comp when they are left-dislocated under the second proposal above. Recall also that it was argued that there was no need to posit a 'two-place' Comp node in the deep structure, nor was there any reason to view this movement to Comp as that of adjunction; instead, such movement to Comp is considered as a substitution transformation. Thus Comp can be filled with one constituent. Sentences that exhibit two left-dislocated elements should be totally rejected or blocked. This proposal would not permit the rule to re-apply, after it has moved the first element to Comp, since the structural description of the rule would not be satisfied by a structure that shows a filled Comp. Consequently, the marginality, not the complete ungrammaticality of such sentences cannot be accounted for. (cf. Bakir 1979)

The other analysis treats wh-movement and left-dislocation or focusing as two separate processes. Wh-movement is a substitution transformation that moves wh-phrases to Comp whereas the movement of left-dislocated constituents is different; there is no given node for such constituents to move into; rather it is assumed that they are sister-adjoined to the verb. The peculiarity of sentences like (27) and (28) stems from the pragmatic constraint against 'focusing' two elements

simultaneously, as mentioned before. Syntactically, there is no principle blocking the application of this movement rule a second time.

Further support for the wh-movement choice comes from the following Arabic sentences. Recall that the wh-word can be preposed from an embedded clause to the beginning of the main clause in Arabic:

59. mataa talaba al-ʔustaaʔ-u ʔan yahdura waalid-u
 when demanded def-teacher-nom that come father-nom
 muhammad-in
 Muhammad-gen

'When did the teacher demand that Muhammad's father come?'

60. ʔayna ʔaraada 'aliyy-un ʔan tada'a hind-un al-kitaab-a
 where wanted Ali-nom that put Hind-nom def-book-acc
 'Where did Ali want Hind to put the book?' -- --

Assuming that the above sentences have the following structures:

59'

$[_S, [Comp_1 \text{ mataa}] [_S \text{ talaba al-ʔustaaʔ-u} [_S, [Comp_2 \text{ ʔan}] [_S \text{ yahdura waalid-u}$
 $\text{muhammadin } [t]]]]]$

60'

$[_S, [Comp_1 \text{ ʔayna}] [_S \text{ ʔaraada 'aliyyun} [_S, [Comp_2 \text{ ʔan}] [_S \text{ tada'a hindun}$
 $\text{alkitaaba } [t]]]]]$

in the representation
 we observe that the wh-phrase has moved from the embedded clause to the Comp of the main clause leaving a trace behind in its original place. A rule of co-indexing will co-index $Comp_2$ with $Comp_1$ with the wh-phrase. This

co-indexing is subject to Subjacency in that the two Comp's involved have to be subjacent to each other. Thus intervening major categories like NP's, PP's, AP's will block the process of co-indexing. Goldsmith (1979) (quoted in Bakir 1979) formalises the rule as follows:

Comp Control

$$\text{Comp}_x \dots_a [\dots \text{Comp} \dots] \longrightarrow \text{Comp}_x \dots \text{Comp}_x$$

Condition: $a \neq \text{NP, PP, AP}$

In sentences (59) and (60) there is no intervening major category between the Comp's and these sentences are properly bound. Also there is no intervening major category between the lower coindexed Comp_2 and the trace of the wh-phrase. Subjacency, which is now assumed to be a condition on proper binding, is satisfied, and therefore these two sentences would receive proper interpretation.

Having discussed the two alternative processes of movement, one which sister-adjoins preposed elements to the verb and another which moves wh-elements to Comp, I provide now more data to test these two rules in an attempt to refine them.

In discussing the process of left-dislocation or fronting, the verb was taken as the point of reference. Thus the Verb is the Context term in Bresnan's terms, in relation to which the movement is determined. The movement adopted is that of sister-adjoining the dislocated element to the verb. In other words, a left-dislocated constituent is moved from the sentence beginning with the verb, i.e. from S or V'. We may now speak of "V' -adjunction" in comparison with V-adjunction (Bakir p. 102). Bakir pursues the subject "in order to determine the validity of the context term in relation to which the validity of the movement is

determined" (Ibid).

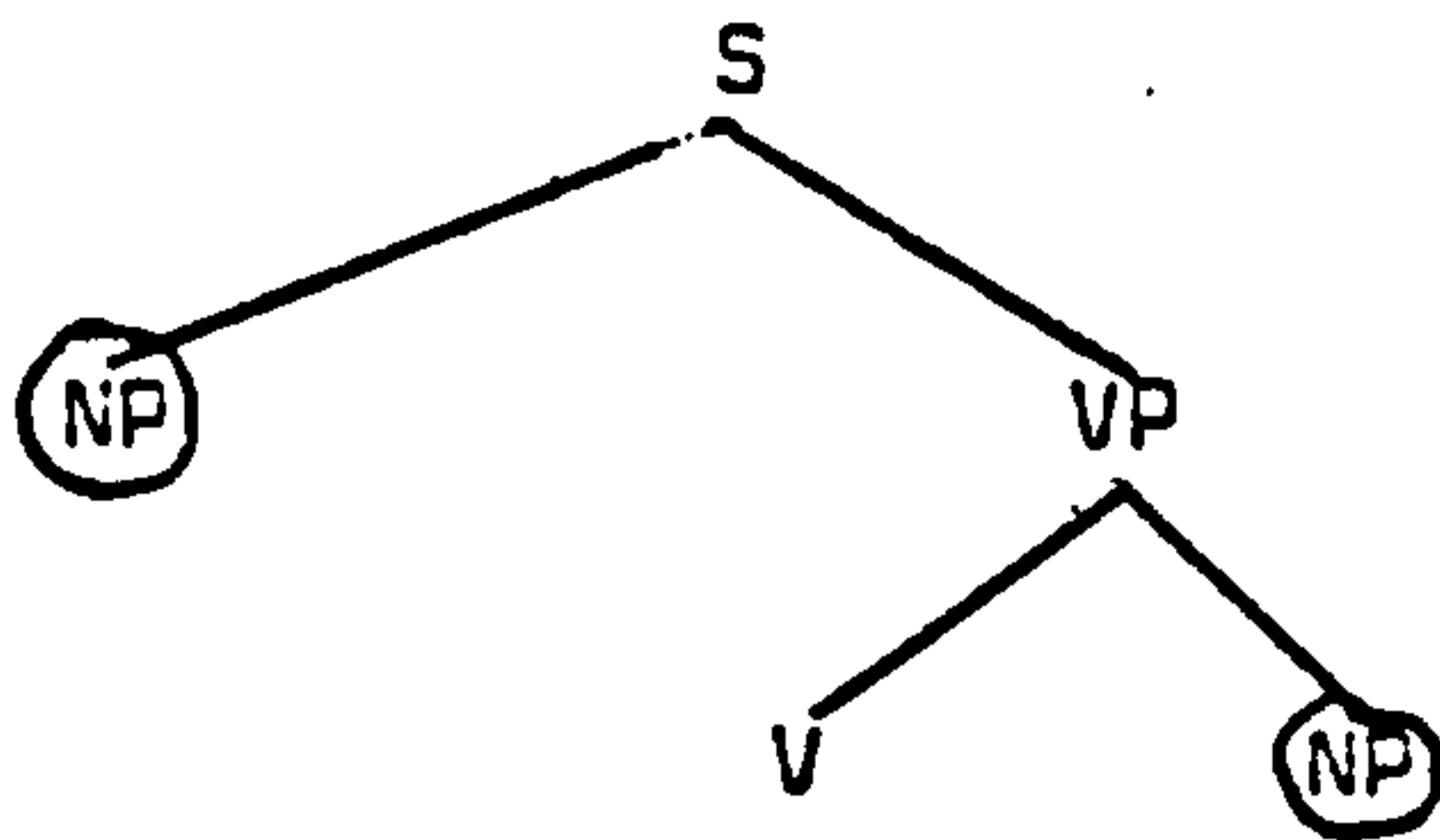
I shall opt for the V'-adjunction. Let us consider some sentences.

61. qad kataba muhammad-un risaalat-an
 has/had wrote Muhammad-nom letter-acc
 a. risaalat-an qad kataba muhammad-un
 * b. qad risaalat-an kataba muhammad-un
 "Muhammad has/had written a letter"
62. sa-/sawfa ?azuuru xaalid-an masaa?-an
 will I-visit Khalid-acc evening-acc
 a. xaalid-an sawfa/sa-?azuuru masaa?-an
 * b. sawfa xaalid-an ?axuuru masaa?-an
 "I will visit Khalid in the evening"
63. Iam ?ara samiir-an fii l-ijtimaa'-i
 not see-I Samir-acc in def-meeting-gen
 a. samiir-an Iam ?ara fii l-ijtimaa'-i
 * b. Iam samiir-an ?ara fii l-ijtimaa'-i
 "I did not see Samir at the meeting"

Under the V' - adjunction, material can intervene between the preposed element and the verb. In (61a) the aspectual marker qad intervenes between the left-dislocated NP 'risaalatan' and the verb 'kataba'; in (62a) sawfa 'will' between 'xaalidan' and '?azuuru'; and in (63a) the negative marker Iam 'not' intervenes between 'samiiran' and '?araa', and negation spans the whole sentence, and aspect marking is a specifier of the verb. In fact, the separation of the specifier from its head results in ungrammaticality, as in the (b) versions of the above sentences. Another point which is worth noting here is the c-command relationship

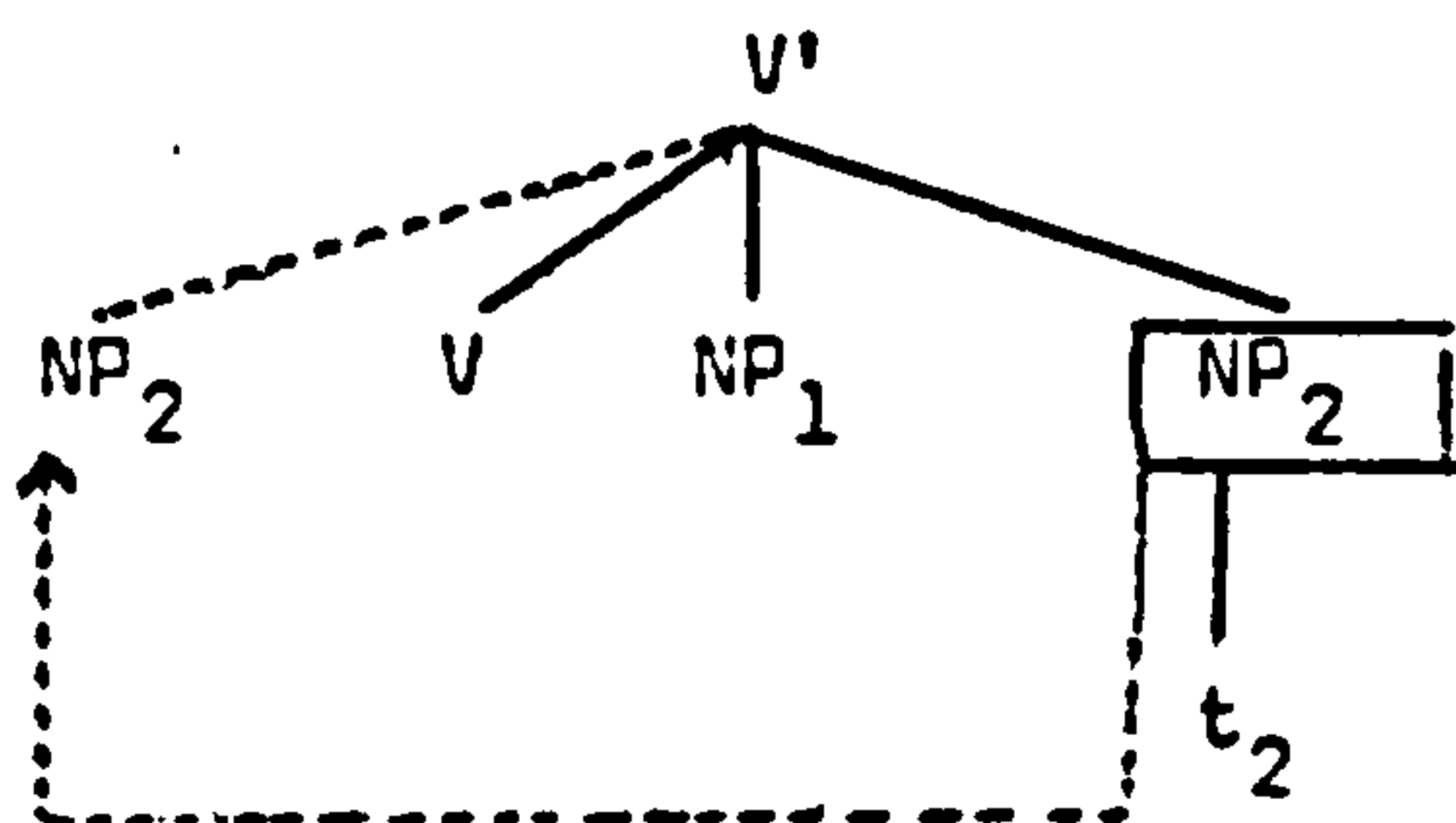
between moved constituents and their traces, i.e. moved constituents c-command their traces, as in the following representation:

64.



and the central idea of this constraint is that of preventing the 'lowering' of transformations: whereas, as Bakir later points out, the V-adjunction does lead to the lowering of transformations, thus 'obliterating' the c-command relationship:

65.



Thus, in (65) the left-dislocated NP_2 and its trace (t_2) c-command each other. Furthermore, we mentioned that negation covers the whole sentence, or V'' (in Bakir's terms) and this V'' , i.e. S is the domain within which the process of left-dislocation applies. The Verb remains as the Context term in Bresnan's sense. In other words, the "trigger" term in this transformation originates within the V'' or S , not outside it, as in the following diagram:

66. V'' [... X'' ...]

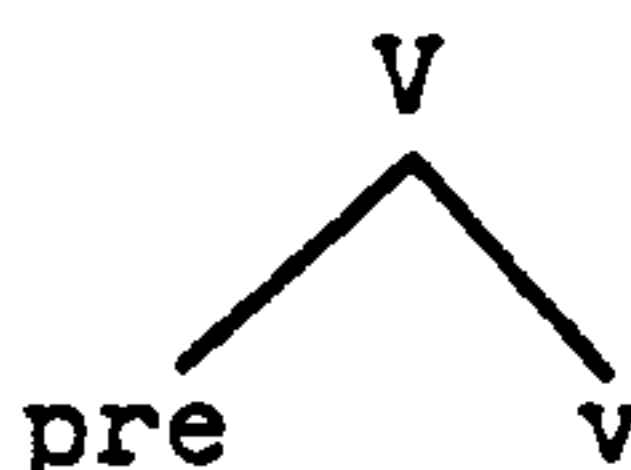
Bakir is also worried about the specifiers of the head, such as aspect, and whether to accomodate that within the V'' - or V-adjunction. I cannot see

any difficulty in handling the specifiers; after all they are specifiers of the verb, which means that we can generate them as parts of the verb: a PS-rule like

$$67. \quad V \longrightarrow (\text{pre}) \overbrace{V}$$

will take account of these specifiers, and the V''-adjunction analysis holds intact. However, this conflicts with the X' theory which does not rewrite a category X^n as the head and its specifier on the same rank. Yet, within the X' theory itself there is room for two cases which violate this constraint: the Conjoined structures and Nominalisation structures, where categories to the right of the arrow can have the same 'rank' as those to the left of it. In fact, within the PS-rules, there is no problem in analysing the pre-verbs as follows:

68.



(Although this is the syntactic structure, the semantic structure modifies the whole sentence).
This is supported by the obvious fact that there is a cohesive link between the verb and its specifiers. This cohesion is shown in the impossibility of any syntactic material intervening between the verb-specifier and the verb. Any parenthetical material is highly exceptional in highly specialised contexts. Thus, the following sentence (69) is marginal

69. ?? maa wallaahi ?axaɣ-tu kitaab-a-ka
 not by God took-I book-acc-your

In comparison with the natural structure

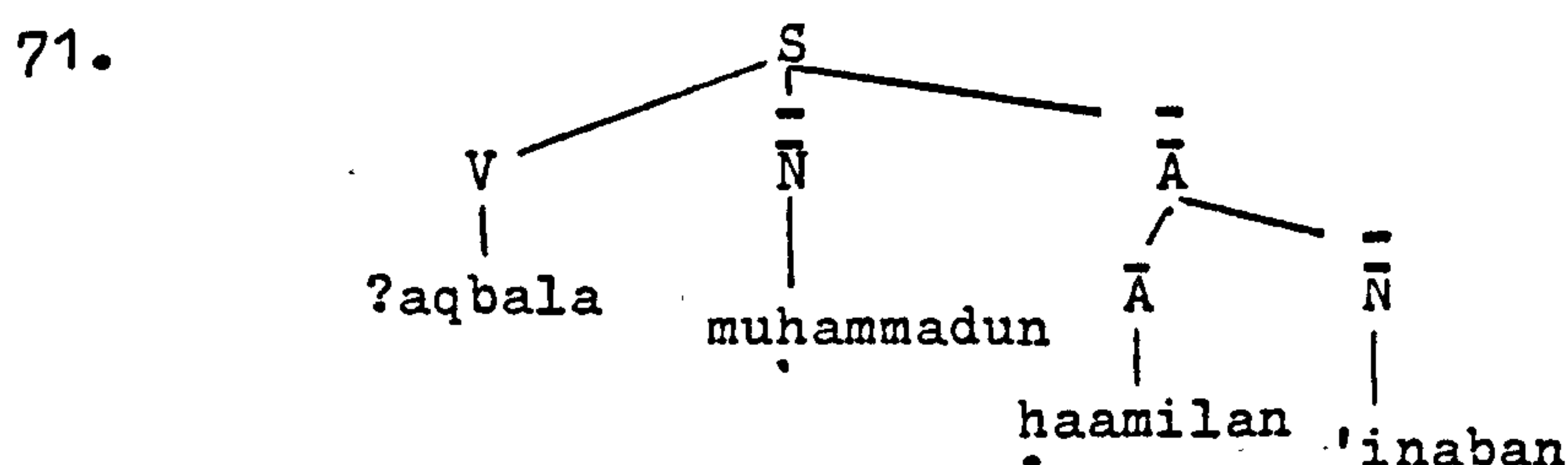
(a) wallaahi maa?axaɣ-tu kitaab-a-ka
 by God not took-I book-acc-your
 'By God, I did not take your book'

It is not strange at all to find this cohesion between the verb and its specifiers in Arabic, a case similar to that of the cohesion between the verb and its subject, in the basic order, (in comparison with the cohesion between the verb and its complement in English, i.e. the VP). Thus we can maintain that a rule like (53) (p.130) will be quite appropriate for moving constituents to the left of the verb.

The last structure we have to deal with in connection with left-dislocation or fronting is the Participial Complement. This is represented by sentences like (70) below:

70. 'inab-an ?aqbala muhammad-un haamil-an
 grapes-acc came Muhammad-nom carrying-acc
 'Muhammad came carrying grapes'

According to rule (54) (p.132), the whole phrase haamilan 'inaban should be left-dislocated. The underlying structure of (70) is shown in Fig.(71) below:



Using Bresnan's model of factorisation, 1 in the Structural Description of rule (54) of Left-Dislocation corresponds to $V[?aqbala]_V$, W corresponds to muhammadun haamilan, and X' corresponds to 'inaban. This factorisation is permitted because the MMC does not apply to left-dislocation.

Example (70) in fact poses a problem. In the first place it violates the MMC Constraint (cf. p. 86). Secondly, it violates

a fundamental constraint proposed by Schwartz(1972), the Unit Movement Constraint, according to which a single application of a transformation can only move a string of elements that form a continuous constituent. We have already presented arguments to support the view that the category of Adjective Phrase or \bar{A} has to be recognised in Arabic syntax (cf. pp.86-7). Following these arguments haamilan 'inaban is a continuous constituent, namely an \bar{A} . The unavoidable conclusion is that Schwartz's Unit Movement Constraint, while appropriate to a number of structures in Arabic, is not generally applicable. It is worthwhile mentioning that Schwartz formulated the constraint on the basis of data from English and Chinese. Arabic differs from these languages in having case endings on nouns and the fact that the initial noun in (70), 'inaban, has an accusative case ending aids the interpretation of the sentence.

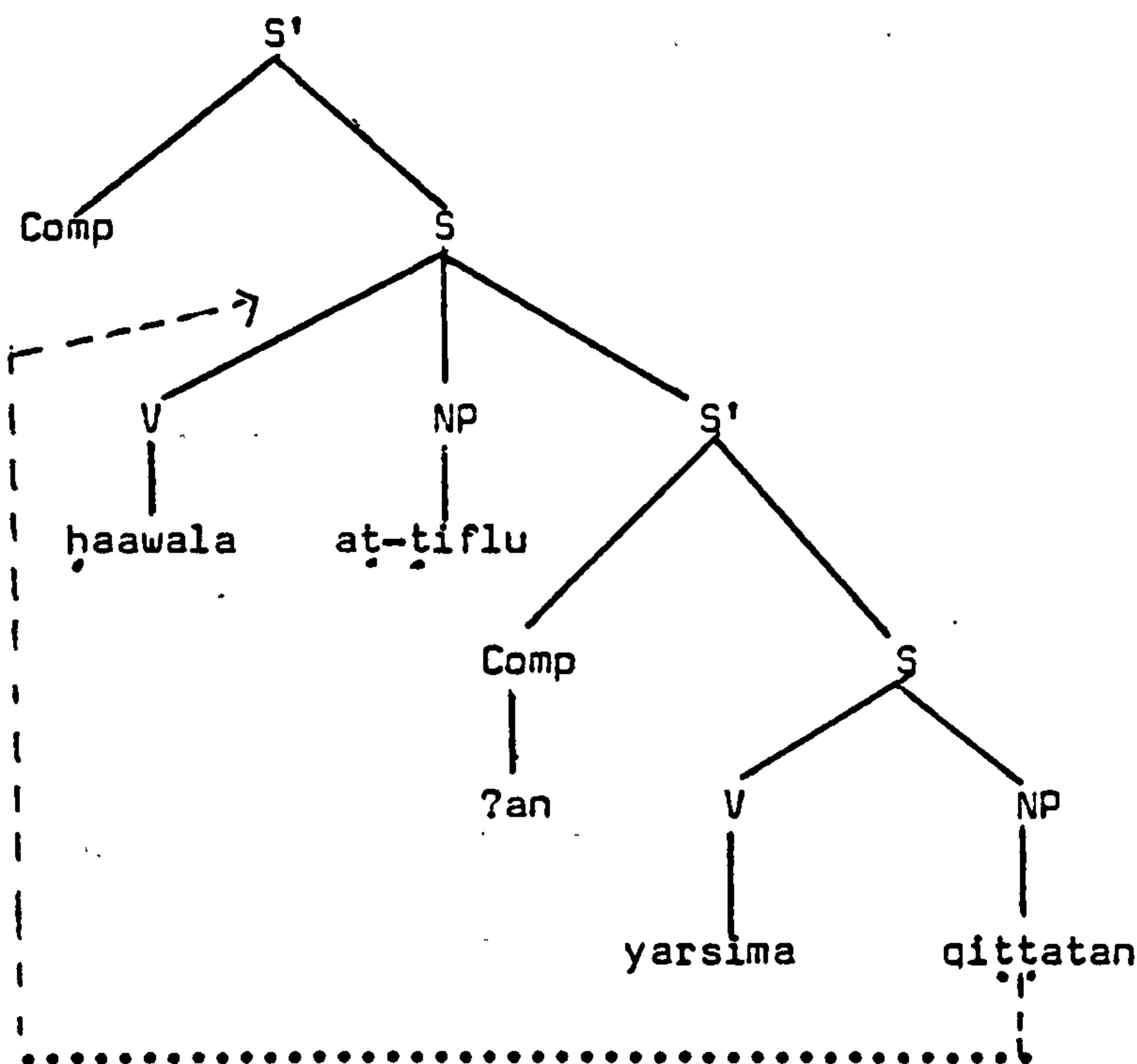
A similar problem arises with respect to a sentence like (72) below, whose underlying structure is shown in Fig.(73). Here too a governed constituent, the \bar{N} qittatan is moved away from its governing verb, and W in the Structural Description of Left-Dislocation corresponds to 'attiflu ?an yarsima.

72. qittat-an haawala at-tifl-u ?an yarsima ...

cat-acc tried def-child-nom that draw

'The child tried to draw a cat'

73.



This will raise the problem of binding or linkage of the left-dislocated constituents with their traces. The problem does not arise in the Chomskyan model of successive movement. But within the unbound movement theory advocated by Bresnan the antecedent and its trace are bounded by the co-indexing device which we used in connection with the wh-phrase dislocation. There, it was a matter of co-indexing the wh-phrase in the highest Comp with the subjacent Comp, until we have all the Comp's coindexed with the wh-phrase. If the lowest Comp is subjacent to the trace of the wh-phrase, the sentence is grammatical, and subadjacency is a condition on binding. Whether the Chomskyan model or the co-indexing one is adopted, binding remains and stems from the need of semantic interpretation rules to assign proper interpretation to surface structures that have undergone movement processes. This is achieved by assuming that the moved elements leave traces behind and these traces have to be linked to their antecedents, with the conditions mentioned in discussion. If traces are not bound to their antecedents, they will remain as free

variables that will not receive any interpretation (cf. Chomsky 1978, "On Binding"). But we mentioned in our discussion that left-dislocated elements are adjoined to the verb and are adjacent to Comp; in other words, they do not move to Comp and thus we cannot apply rule (54). These elements are co-indexed with their traces by co-indexing the Comp which is adjacent to the fronted element with the referential index of this element, as in

$$74. \quad \text{Comp} \quad X'_x \quad \longrightarrow \quad \text{Comp}_x \quad X'_x \quad (\text{Bakir 1979})$$

After this, the coindexing device of Goldsmith (p. 139) would ensure that all other intermediate Comp's are coindexed with this Comp.

3.2.6. WH-Movement:

To recap, I have discussed two processes of left-dislocation: one involving wh-phrases and the other involving other constituents. However, the wh-movement was discussed within the context of left-dislocation. It was assumed at the beginning that wh-movement and left-dislocated elements are reflections of the same process. But through the discussion of a positional slot as well as the co-occurrence discrepancies it turned out that the two processes are different. Thus, while wh-words move to Comp, other constituents go to the left of the verb. Also, it was argued that left-dislocation will sister-adjoin elements to the verb while wh-movement is that of substitution, thus the apparent similarities and complementary distribution does not support a unitary treatment of the two phenomena. I also argued that wh-movement is a process of filling in the Comp node, replacing the complementiser. This was based on two things: first, Arabic grammar does not allow both a complementizer and a wh-word to surface together; second, a slot is necessary but not reserved for

wh-phrases to move into if an alternative model to Chomsky's successive cyclic one was adopted. This other model was taken from Bresnan, where the movement of a wh-phrase is done in one step, from the place it originates to the Comp where it shows up in the surface structure. In other words, the wh-phrase is daughter-adjoined to Comp. A co-indexing device - rather than the successive movement - is utilised to co-index the wh-word and its trace by co-indexing intermediate Comp's.

Furthermore, Bresnan's model is preferable to Chomsky's because wh-phrases cannot show up at all Comp positions; this is to say that there are Comp's that appear as sisters of S' and others that appear as sisters of S'' structures. Only Comp's that are sisters of S' provide the context for wh-words to move into. We also showed that wh-words cannot occupy the Comp of S'' structures, i.e. Topic-Comment structures (see Chapter IV): wh-words move only to a Comp adjacent to the verb. This means that the movement of the wh-word from the deeply embedded clause to the first Comp will have to cross over Comp₂, because this second Comp is not an appropriate place for a wh-word.

In what follows I discuss the properties and application of the wh-movement. However, it is worth noting first that there are two ways of forming questions in Arabic to inquire about the 'message'. One way is by moving the wh-word to the Comp, and the other is by asking questions

within a topic-comment structure, with the topic being the wh-phrase.

This will be discussed in detail in the next chapter.

As for the first way, a wh-phrase marked with [+wh] is moved to the Comp in a simple verbal sentence. Consider the following example:

75. [_S [_{Comp} ?ayna] [_S jalasa muḥammadun [_t] ?amsi]]

where sat Muhammad yesterday

'Where did Muhammad sit yesterday?'

76. [_S, [Comp maa^haa] [_S kataba 'aliyyun [t] 'alaa at-ṭaawilati]]

what wrote Ali on the table

'What did Muhammad write on the table?'

77. [_S [_{Comp} kayfa] [_S raja'a al-jayšū [t]]]

how returned the army

'How did the army return?'

78. [_S, [Comp man] [_S raʔaa xaalidun [t] fii s-suuqi]]

who saw Khalid in the market

'Who(m) did Khalid see in the market?'

The rule of wh-movement can be approximated as

74. Comp Y X' Z
[+wh]
- 1 2 3 4 → 3 2 t 4

Notice that (3) replaces (1), and the rule is that of substitution. Also, the wh-movement is a transformation that moves a major syntactic category marked with [+wh] to Comp. However, we mentioned

This condition which explains the ungrammaticality of such sentences is what Chomsky calls the Opacity Condition. Let us briefly discuss this constraint, summarising Chomsky's argument.

In discussing conditions "On Binding", Chomsky (1978) formulates the Specified Subject Condition (SSC) and Prepositional Island Condition (PIC) as follows:

82. (Chomsky's 19)

If a is an anaphor in the domain of the tense
or the subject of B, B minimal (i.e. smallest
domain), then a cannot be free in B, B = NP or S'.

(a) here is an anaphor and it is bound in B if it is c-commanded and co-indexed with a c-commanding category in B; otherwise, (a) is free in B. This phenomenon is called the Opacity Condition. Tense and Subject are 'operators' that make certain domains opaque.

Let us illustrate with some examples from Chomsky.

83. (a) It is unclear [S' who PRO to visit t]
(b) It is unclear [S' who t to visit PRO]
(c) John asked Bill [S' who PRO to visit t]
(d) John asked Bill [S' who t to visit PRO]
(e) They told me [S' what PRO to give each other t]
(f) I told them [S' what PRO to give each other t]
(g) They saw [NP John's pictures of each other]

In (83 a-g) t, the trace of the wh-phrase, is coindexed with the wh-phrase and is thus bound in S'. The Opacity Condition, therefore, does

not apply to the trace. In (a) PRO is open to arbitrary interpretation, since it does not lie in the domain of Tense or Subject in the embedded S'. Consequently, (a) is grammatical. In (b) PRO is in the domain of Subject (i.e. the trace of who) and cannot be free in S', thus (b) is not a well-formed structure : the sentence "It is unclear who to visit" cannot mean "It is unclear who is to visit some unspecified person". In (c) the lexical properties of the verb ask make John the antecedent and controller of PRO, which is not subject to the OC, and thus the sentence means that John asked Bill who John is to visit. (d) is excluded by the OC ; the sentence does not mean that John asked Bill who is to visit John. (e) and (f), the reciprocal phrase each other requires an antecedent, a PRO, by the OC ; consequently, PRO and each other must be co-indexed for the structure to be well-formed. In (g) Opacity prevents any interpretation, since each other, is in the domain of the subject John and is free in the domain NP, though bound by they, outside this domain. Chomsky goes on to refine and consequently define the Opacity Condition as follows:

84 " if a is in the domain of the subject of B
B minimal, then a cannot be free in B".

The Opacity Condition is thus a condition on binding that is limited to and replaces the SSC. Notice also that B is a S' or NP, the subject, the most prominent NP in such structures, and this subject creates a domain in that no anaphor that is c-commanded by the subject can be free, i.e. not bound, in this S' or NP. The class of anaphors include traces, PRO, Reflexives, and Reciprocals. According to the OC, these elements cannot be free within an S' or NP when they are not subjects in these two domains since this will put them within the domain of the subject.

If Tense and Subject are operators that create opaque domains, we may assume, on the basis of Arabic data, that Topic can also be an operator and thus create an opaque domain. The consequence of such an 'operation' will result in leaving no free or unbound anaphors. Accordingly, sentences (80) and (81) are ungrammatical because the wh-phrase has moved to the left of the Topic, leaving the trace free within S'', which is an opaque domain in Arabic; this is illustrated by the following structures: (cf. Bakir 1979)

80''.

[S' [Comp man] [S'' [Topic 'aliyyun] [S' [Comp] [S raʔaa [t] fiis-suudi]]]]

Opaque Domain

81''.

[S' [Comp mataa] [S'' [Topic muḥammadun] [S' [Comp] [S raja'a min al-madrasati [t]]]]]

Opaque Domain

However, the Opacity Condition could be easily violated if we consider some other sentence:

85. mataa qul-ta l-i muḥammad-un raja'a min al-madrasat-i
when said-you to-me Muhammad-nom returned from def-school-gen

85'.

[S' [Comp mataa] [S qulta l-i] [S' [Comp] [S'' [Topic muḥammadun] [S' [Comp]
[S raja'a min al-madrasati [t]]]]]]]

In the above sentence, the wh-phrase has moved from its place in the embedded clause, leaving a trace behind, to the Comp of the matrix clause, yet the sentence is grammatical; whereas it should be ungrammatical since the trace of the wh-word is free in S''. This means that the ungrammaticality

of sentences like (80) and (81) above is not because of violating the Opacity Condition.

However, if the Comp can be characterised, the ungrammaticality of those sentences can be accounted for. In other words, we could say that the Comp's of S' allow the wh-phrase to move and the output is grammatical, whereas the Comp's of S'', i.e. of Topic-Comment structures, do not allow such movement. This means that if we mark the 'specifiers' of a category such that the Comp of S is marked with the feature $[+wh]$ and that of S'' with the name of the category S'', then this will restrict the rule of wh-movement; the "specifier V'' (S) marked with $[+wh]$ will make it available for wh-words to move into, while the specifier V'''' (S'') is not marked with this feature". The wh-movement rule (79) can be refined as

86.

Comp	Y	X''	Z	
$[+wh]$				
1	2	3	4	\rightarrow 3 2 t 4 " (Bakir 1979).

Notice that this rule will move major categories. Parallel to the rules of left-dislocation and Verb-Attraction, this rule will also be subject to a general principle, namely the MMC Constraint. Thus the movement of any $[+wh]$ constituent is blocked from moving to Comp unless the whole category is moved, i.e. unless the major node dominating the constituent is moved.

87. * man ?axaʃat hind-un kitaab-a --
 who took Hind-nom book-acc
 'Whose book did Hind take?'

88. * /

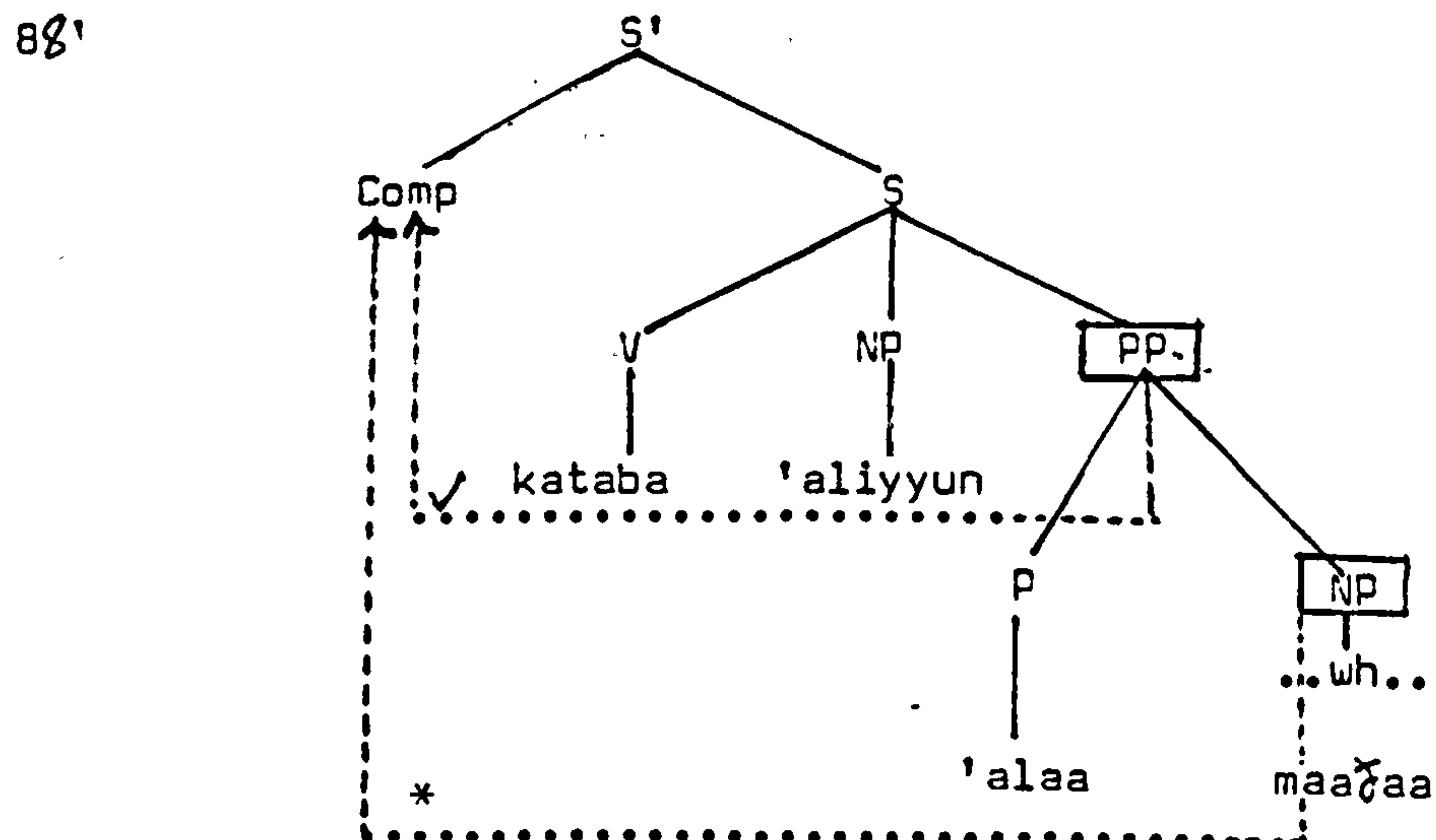
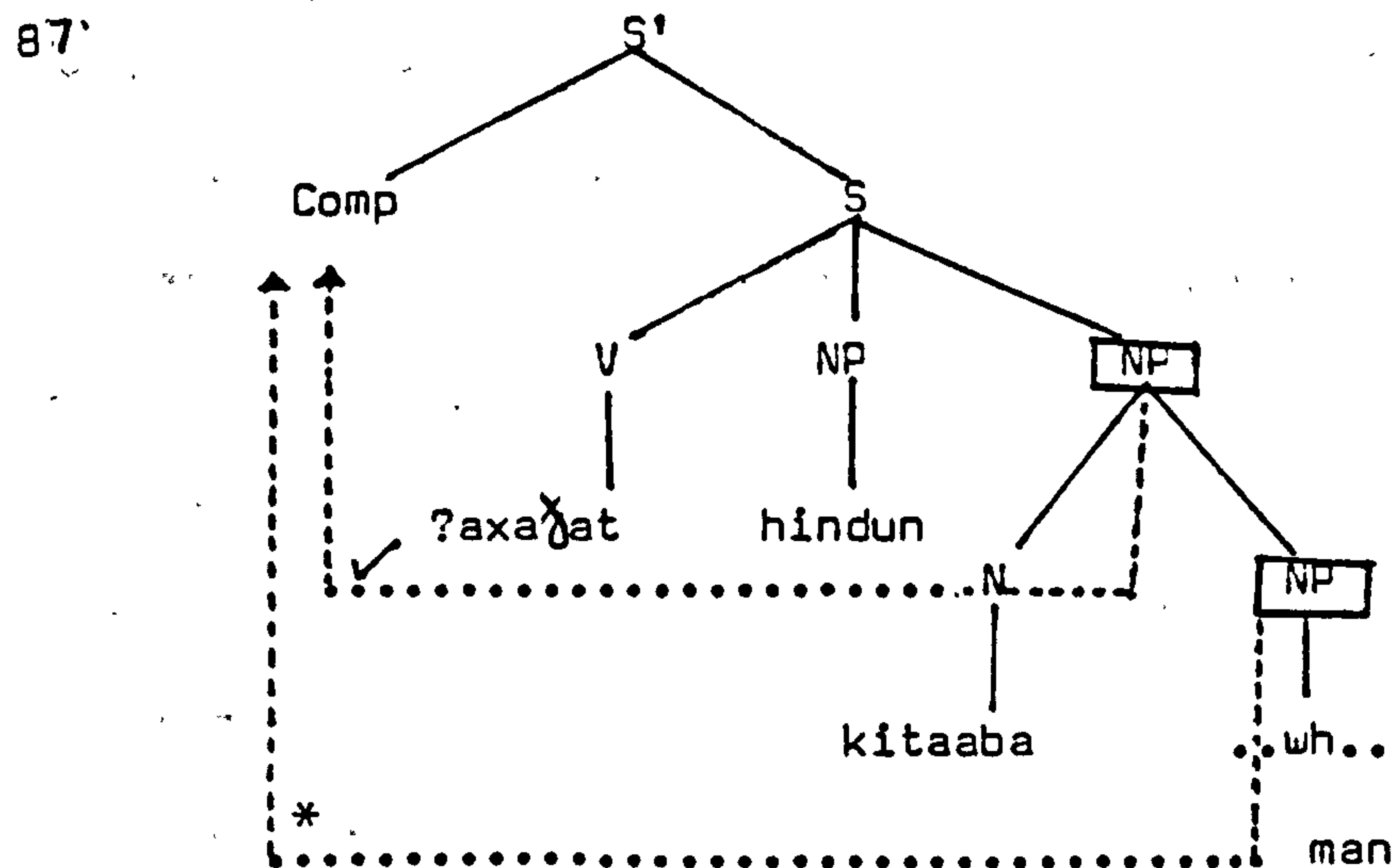
88.* maaʔaa kataba 'aliyy-un 'alaa —
 what wrote Ali-nom on
 'What did Ali write on ?'

In (87), the wh-word man is directly dominated by a higher NP node; in (88) the wh-word maaʔaa is directly dominated by a PP. Notice the grammaticality of these sentences when the entire NP or PP is moved:

87.a. kitaaba man ?axaʔat hindun

88.a. 'alaa maaʔaa kataba 'aliyyun

This is illustrated with the following phrase markers:



3.2.7. Subject Left-Dislocation

So far I have been dealing with the left-dislocation of constituents of various syntactic categories. The NP's involved in this process have been Object NP's. The subject NP, more precisely, the grammatical subject, has not been dealt with yet, in connection with left-dislocation or fronting. Recall that we discussed the notion of grammatical subject in Chapter One; there (p. 10) it was shown that the subject is characterised with its position after the verb, number and person agreement, case, and control of the infinitive. But one might ask: Why 'devote' a special section for the left-dislocation of the subject; or, Can the subject be fronted?

The fronting of the subject constituted another major area of controversy between the two traditional schools of grammar, the Kufis and the Basris. The Basris totally rejected the idea of fronting the subject for reasons which will be discussed shortly; the Kufis allowed this and defended their position. They maintained that the subject, like any other constituent in the sentence, is entitled to left-dislocation. Let us briefly discuss the two views and try to opt for the most 'reasonable' analysis.

In rejecting the preposing of the subject, the Basris claims rested on a number of issues. First, the order of the subject and the verb, they say, is as strict as that of the complementiser and the verb. However, there are cases where the subject appears before the verb, but such subjects were considered by the Basris as cases of overt subjects of 'implied' and deleted verbs to the left of them. This is in line with the general principle of government: constituents govern or are governed by others. The governing constituent is called 'aamil "regent", the governed ma'muul "operative". Thus, in a sentence like

89 . 'aliyy-an qaabal-tu-hu
 Ali-acc met-I-him
 'I met Ali'

the NP 'aliyyan is governed by another deleted verb, not by qaabala which governs the pronoun -hu 'him'. This is because a regent can govern only one constituent or operative of a specific grammatical relation. This leaves the NP 'aliyyan at the beginning of the sentence without government, which is disallowed by the Basri's, because this noun is in the accusative which is a sign of government. They assume a verb identical to the main verb of the sentence, which governs the NP 'aliyyan and is deleted on the surface. Postulating a hypothetical verb to govern was used as a device to account for 'exceptional' cases where a NP intervened between the complementiser ?in or subordinate conjunction ?iXaa "if" of the conditional sentence and the following verb.

90. ?in 'aliyy-an laqii-ta-hu fa sallim 'alay-hi
 if Ali-acc met-you-him then greet(You) on-him
 'If you meet Ali, greet him (lit. pass my regards to him)'

91. ?iXaa ?anta ?akram-ta al-kariim-a malak-ta-hu
 if you regarded-you the-kind-acc won-you-him
 wa ?in ?anta ?akram-ta al-la?iim-a tamarradaa
 and if you regarded-you the vile-acc rebels(he)
 "If you show regard to the kind, you 'own' him;
 if you show regard to the vile, he rebels".

In the above sentences, the NP 'aliyyan and the pronoun ?anta occur between the conditional and the verb. Such occurrence was not regarded as a violation

of the rule of government; rather the poetic licence or some stylistic overtones 'justified' that. Grammarians would posit a hypothetical verb that preceded the NP or pronoun as to make the rule of inseparability of the conditional and the verb exceptionless. This hypothetical verb would be the regent governing the NP before the verb, and it would also keep the NP under government. This is rather far-fetched.

However, within a model of grammar where the movement of constituents is one of "chopping" rather than 'copying', no moved constituent will leave a pro-form, and such occurrences of 'exceptions' are not accounted for and remain as residual cases. (cf. Bakir 1979)

Sentences like (90) and (91) could be treated as Topics followed by the comment, i.e. a case of analogy to topicalisation. Notice also that some traditional grammarians have allowed another option, a stylistic variation, whereby the NP can be in the nominative and thus becomes the topic:

92 'aliyy-un qaabal-tu-hu
 Ali-nom met-I-him
 'Ali, I met him'

As for cases with hypothetical verbs, a matter of rhetoric, they can be accounted for in a simpler way. In sentences like (91) above what is actually happening is that the subject ?anta is preposed. One could assume that under 'emphatic' pressures, one may violate the restriction against the preposing of constituents in this situation. Interestingly enough, all such preposed subjects happen to be first or second person pronouns; the fronting of subjects other than these pronouns is rare, even within the traditional school. But the question still remains: Why did those grammarians 'prohibit' the fronting of the subject?

The Basri s quickly respond: to prevent or avoid Structural Ambiguity, and to 'keep' the form of the verb Unchanged. Consider the

following sentence:

93 muḥammad-un kataba risaalat-an
 Muhammad-nom wrote letter-acc

The NP muḥammad, which happens to be the subject, is left-dislocated by rule (54) operating on sentence (93a):

93.a. kataba muḥammad-un risaalat-an
 wrote Muhammad-nom letter-acc

or, (93) can be of a different structure: muḥammadun can be a base-generated topic, with kataba risaalatan as a sentential comment. In other words, sentence (93) may have either of the following structures:

93' [S' [Comp] [S muḥammad-un kataba — risaalatan]]
93'' [S' [Comp] [S' [Topic muḥammadun] [s' [Comp] [S kataba risaalatan]]]]

By rejecting the preposing of the subject, the Basri s would not derive (93) from (93') in order to avoid structural ambiguity.

As for the change in the form of the verb that would result from the left-dislocation of the subject, this rests on the fact that the verb agrees with its subject in person and gender, in the VSO order. This is particular to third person subjects. With first and second person subjects there would be no overt independent pronoun in subject position after the verb, except in emphatic contexts. However, within the programme of the traditional grammarians, a distinction should be made in the form of the verb in relation to subject position. Thus, if the subject is to the left of the verb, the verb has to agree with it in person and gender and in number as well. But if the subject

is in its original place, i.e. after the verb, the subject would require agreement in person and gender only, and in such a position agreement in number is disallowed.

The singular form for singular subjects can be taken as the unmarked form of number-agreement, morphologically represented as \emptyset . The marked forms will be those of dual and plural subjects, and the distinction in the form of the verb becomes clear. This was discussed in Chapter - One (pp. 25-26); hence I shall not pursue it any further.

It is clear then why the Basris disallowed the fronting of the subject. However, within a pragmatic approach to language, I cannot see why a function like focus, for example, cannot involve the subject as well as any other category in the sentence. We have seen that a process of left-dislocation can front, and thus focus, any constituent, making it the most prominent or salient element in the sentence. The subject can also be accommodated by this process. Indeed, pragmatic considerations confirm this trend; consider the following question:

94. man ?axa^ha al-kitaab-a
 who took def-book-acc
 'Who took the book?'

An appropriate answer would be

95. 'aliyy-un ?axa^ha al-kitaab-a
 Ali-nom took def-book-acc

where the order of constituents shows Ali before the verb, rather than Verb-Subject. In fact, we are asking about the 'person' who 'took the book', i.e. the subject, and the answer provides the information required. Thus, 'aliyyun is not a given entity about which something is said; this is to say that 'aliyyun is not the topic; it is the new information provided

by the question. Pragmatically, then, there is no difference between the NP 'aliyyun in this sentence and the NP muhammadan in the accusative in the following sentence:

96. muhammad-an raʔay-tu-hu
 Muhammad-acc saw-I-him
 'I saw Muhammad'

where muhammadan is a focused object that has been moved before the verb. Moreover, 'aliyyun receives the same stress in the same way that muhammadan receives in sentence (96). (Notice that (92) is more common than (96). In fact, sentences like (96) hardly occur in MWA.

By contrast, a sentence which does not involve movement, i.e. left-dislocation where an NP is "already" to the left of the verb, is said to be of the topic-comment type. This NP is the topic about which something is said, and the sentence will have the same surface structure as (96). However, no primary stress will be assigned to this NP. Also, this NP will be 'spatially' distant or separated from the comment; in other words, there will be a 'pause' after it. Such features will act as the disambiguating factors; i.e. they will account for the 'assumed' structural ambiguity of traditional grammarians. Furthermore, such surface structural ambiguity does not, even should not, prevent the subject from undergoing the process of left-dislocation.

As for the change in the form of the verb that subject-fronting creates, this is not a 'big' issue within a standard transformational analysis; for it is a matter of number agreement marker, present when the subject is before the verb and absent when it is after the verb. However, such a change is important when morphology is done in the lexicon, as I tend to treat it (see later discussion). In other words, this marker depends on the position of the subject in relation to the verb in the Arabic

sentence. Notice the 'contradiction' in the traditionalists' view: number is a matter of agreement between the subject and the verb on the one hand, and this marker is the subject in the form of a clitic pronoun, on the other. What about the agreement between the nouns and adjectives, or between dual nouns and the adjective following them.

To cut a long story short, we can assume—on the basis of subject-verb agreement in Arabic — that the number marker is for number, not a subject-pronoun enclitic. Moreover, recall that number, person, and gender are Portmanteau Morphs. They are grammatical formatives or features generated under the verb. In other words, the verb is taken to be marked with number agreement features. Thus, in a sentence like

97. ?istalama al-?awlaad-u kutub-an min al-madrasat-i
p.m.

received(p.m.) def-boys-nom books-acc from def-school-gen

'The boys received books from school'

the verb is marked as plural and masculine, and this is realised on the surface as

97a. ?istalama al-?awlaad-u kutub-an min al-madrasat-i

with a later rule that will change this number feature on the verb to the unmarked form, i.e. the singular, only when the subject occurs after the verb. This means that the verb is initially marked for number, and this will show on the verb whether the subject is left-dislocated or deleted if the topic is co-referential with it.

Rule (54) of left-dislocation can apply on a structure like (97) above since such a structure meets the structural description of the rule. Thus, the object NP kutuban can be fronted, or the subject NP al-?awlaadu, as in (97b) and (97c), respectively:

97.(b) kutub-an ?istalam- (p.m.) al-?awlaad-u min al-madrasat-i

97.(c) al-?awlaad-u ?istalam--(p.m.) kutub-an min al-madrasat-i

The verb in (97b) will undergo the rule of feature changing to the singular, the unmarked case, since the subject is after the verb, while the verb in (97c) will not, because the subject is now before the verb.

We mentioned earlier that the Basris rejected the idea of subject left-dislocation or fronting. The Kufis, on the other hand, allowed that. Thus, the idea is not a novel one.

We also mentioned that the verb can be marked with the number-agreement feature. The rule for handling the change in this marker can be of the following form:

98.
$$V \longrightarrow [U \text{ marked}] / \text{---} X \text{ NP}$$

$$[+3 \text{ person}]$$

The feature U marked, the unmarked case, is spelled out by a subsequent rule as the singular form of the verb. Notice here that the order of the application of this rule is strict (notice that there will be no need for this if number agreement is handled in the lexicon; see next section): it must apply after all other rules (of deletion, movement,...) have applied. A sentence with the deep structure

99. ?aqaama(d) al-baladaani 'ulaaqaatin diblomaasiyyatin
 established def-countries(d) relations diplomatic
 'The two countries established diplomatic relations'

will undergo the rule of left-dislocation (54) that may front the subject to produce

99i.(a) al-balad-aani ?aqaama-(d) 'ulaaqaatin diblomaasiyyatin

Notice that if this order of rule application is not maintained, we would end up with ungrammatical structures. In other words, if rule (98) is applied before that of left-dislocation, the ungrammatical (99b) will result:

99.(b) al-baladaani ?aqaama-Ø 'ulaaqaatin diblomaasiyyatin

Also, this rule (98) of feature changing must also follow the rule of subject-deletion (see next Chapter) which deletes the subject of the comment part when it is co-referential with the topic. Thus, in a sentence like

100. al-?awlaad-u mataa raja'-uu min al-madrasat-i
def-boys-nom when returned (p.m.) from def-school-gen
'The boys, when did they return from school?'

the subject of the comment is deleted because of its co-referentiality with the topic al-?awlaadu, and no change in number agreement is required. This is to say that by the time rule (98) has come to apply, the subject had already been deleted. If the reverse happened, i.e. if rule (98) first applied before subject-deletion, then we would get the wrong result:

100.(a) al-?awlaad-u mataa raja'a-Ø min al-madrasat-i

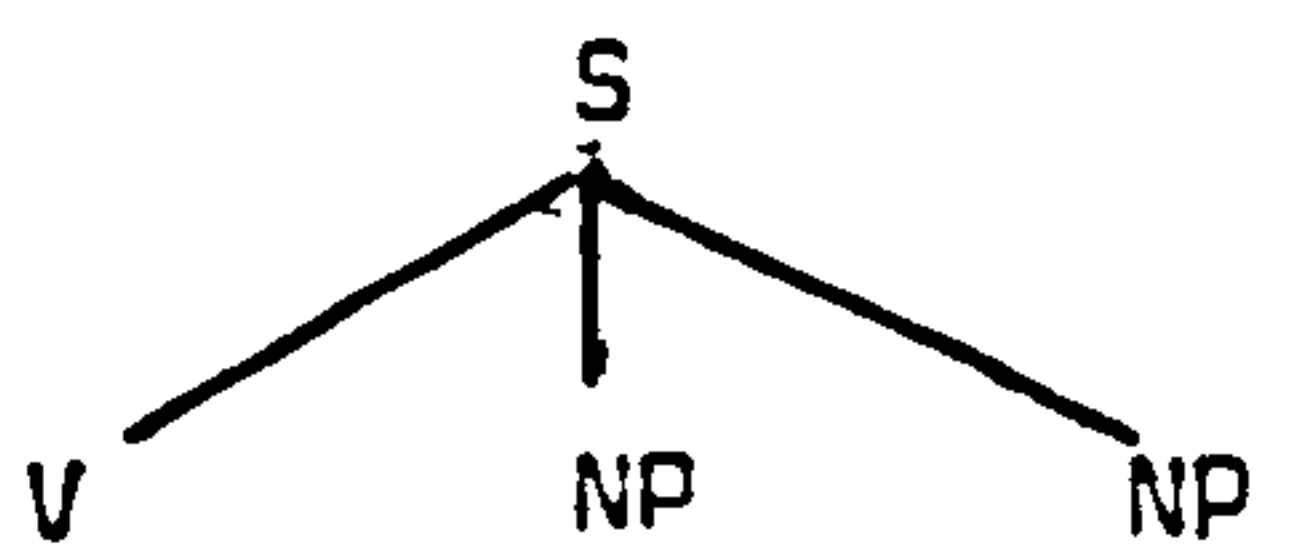
An equally plausible but more economical and beneficial analysis is offered by the lexicalist approach; plausible in the sense that the same results are achieved but in an economical way; this is to say that there will be no need for certain rules to be obligatory and others to be optional. Moreover, economy will also yield certain beneficial aspects in the grammar in that there will be no need for external or extrinsic ordering of rules. This will reduce the burden on the grammar in one way, namely

by simplifying the transformational component, and by enriching the lexical component by allocating all the necessary information therein.

Among the various proposals on this subject (cf. Starosta, Gazdar), Brown & Miller (1982) offer a cogent account; they re-analyse a number of structures from a syntactic and a morphological point of view, thus introducing certain beneficial modifications of the standard model of transformational grammar. They draw the demarcation line between syntax and morphology in a clear manner; a number of transformational rules disappear, e.g. passive, affix hopping, equi-NP-deletion, raising, Tense/Modal deletion, POSS movement, ING movement, and verb number agreement. This model can be adopted for Arabic data both in syntax and in morphology. Accordingly, let us 'revisit' the verb number agreement in Arabic previously treated in a transformational fashion.

In line with Brown & Miller, who adopt an old idea in European linguistics, namely that the verb is the central category in the sentence (cf. Matthews, Tesnière), number can be considered as a feature on the verb like other features; this is to say that the selectional features of the verb, which require a subject noun to be [+ Human], etc., can be extended to include the number feature. Thus the inherent features on verbs will also include the feature $[+sg]$, $[-sg] \rightarrow \begin{cases} +plural \\ +dual \end{cases}$, together with the feature $[+perf]$. The lexicon is also assumed to contain morphological rules which will add the appropriate prefix or suffix to a base form. Let us illustrate this point.

For a verb form like katabna 'they wrote', third person feminine plural perfective, or yaktubna 'they write' third person feminine plural imperfective, to be inserted in a phrase marker like



this verb form must be fully specified in the lexicon, through morphological rules, redundancy rules, and selectional frames:

Morphological Rules:

$$\begin{array}{lcl} \text{Rule}_n & = & \text{C C C} \Rightarrow \begin{bmatrix} [\text{CaCaC}] & \underline{\text{na}} \\ [+fem] & [+perf] [+fem] \\ [+pl] & [+pl] \\ [+perf] & \end{bmatrix} \end{array}$$

$$\begin{array}{lcl} \text{Rule}_k & = & \text{C C C} \Rightarrow \begin{bmatrix} \underline{\text{ya}} & [\text{C CuC}] & \text{na} \\ [+fem] & [-perf] & [+fem] \\ [+pl] & & [+pl] \\ [-perf] & & \end{bmatrix} \end{array}$$

(For a similar, but far from identical, approach, cf. Lieber (1981)).

Corresponding to these rules are features like $[+ \text{Rule}_n]$, $[+ \text{Rule}_k]$, etc. and the rule applies only if the lexical entry contains the correct rule feature which can be added by a redundancy rule. Thus, -na is added to a verb base only if the verb is perfective and plural and feminine, and this can be expressed by rule(a) below which says that if the features $[+pl]$ and $[+fem]$ and $[+perf]$ are present, the feature $[+ \text{Rule}_n]$ can be added:

Redundancy Rules:

$$(a) \quad [+pl] \ \& \ [+fem] \ \& \ [+perf] \Rightarrow \quad [+ \text{Rule}_n]$$

$$(b) \quad [+pl] \ \& \ [+fem] \ \& \ [-perf] \Rightarrow \quad [+ \text{Rule}_k]$$

Thus, number agreement between the noun and verb can be handled by a feature being imposed on the subject noun from the verb, which is done

by selectional frames that should now be specified, e.g.

$$[+pl] \ \& \ [+fem] \implies \begin{array}{c} [+ \ [- \ N] \\ [+pl] \\ [+fem] \end{array}$$

Under this proposal then there will be no need for some rules to be obligatory and others to be optional, nor will there be any need for ordering or structure manipulation as will be required under a transformational account. The actual form of the verb is now inserted directly into the phrase marker, a far more economical and beneficial solution. This can be easily extended for handling the topic, for example, in a topic-comment structure, where the actual form of the topic NP, already generated in the base and specified by being $[+nom, +def]$ can be directly inserted into its position in the phrase marker.

In this Chapter, I discussed the process of left-dislocation of constituents. I drew a distinction between two types of left-dislocated elements: wh-elements which move to Comp, and other constituents which move to the left of the verb. At the beginning, I tried to handle the fronting of all constituents within a unitary analysis; however, the apparent similarity between wh-elements and difference in distribution necessitated the distinction between the two. I have also tried to give a formal account as well as a characterisation of these movement processes. Finally, the controversial issue of subject-fronting, controversial within the traditional schools of Arabic grammar, was discussed, and the view that the subject, like any other constituent in the sentence, can be fronted was adopted.

CHAPTER IV

4. Topicalization

4.1. Definitions & Distinction of Topic-Comment Structures

In Chapter III, I discussed the process of left-dislocation whereby constituents of various syntactic categories can move out of their places in the VSO order of the Arabic sentence to a position preceding the verb. Thus, an object-NP, a PP, or a Participial Complement can undergo this movement. Later in the chapter it was also argued that the subject-NP undergoes this process of left-dislocation.

In relation to subject left-dislocation, it was pointed out that traditional grammarians rejected the idea of subject-fronting in order to avoid structural ambiguity, i.e. confusing the resulting structure with that of the Topic-Comment. I also argued against that.

In this chapter, I discuss Topicalization in detail. By topicalization I mean structures of the topic-comment type. I have deliberately allocated a 'complete' chapter to this structure in order to show, on empirical grounds, that the topic-comment structure differs from left-dislocation in many respects.

We mentioned earlier in this work that Arab grammarians distinguish between two kinds of constructions; the verbal sentence - that which starts with a verb, jumlatun fi'liyyat, and the nominal sentence, that which starts with a noun, jumlatun ?ismiyyat. Topic-Comment structures fall within the latter type. However, before discussing the structure of the topic-comment construction, two important points should be clarified: the terminology and the reason or reasons for distinguishing this structure from other structures that involve left-dislocation or preposing.

As for terminology, it can be seen that notions like extraposition, left-dislocation, fronting, and topicalization are almost vague and not clearly defined. As structural definitions, however, these notions are

clear; thus theme, for example, is defined as whatever comes first (cf. Halliday); extraposition as the movement of a subordinate noun clause or a gerund or an infinitive to the end of the sentence. But the actual communicative motivation may not be clear. Thus one could say that this vagueness stems from the fact that different linguists use these terms to mean different things and to describe different phenomena. Thus, dislocation or displacement of elements to the right is referred to by linguists as extraposition; but the appearance of elements to the left of their usual place, i.e. in sentence-initial position, is given different names and labels: topicalization or focusing; or 'left-dislocation' and 'clefting'; or 'fronting'. Sometimes, one linguist's topicalization is another's focusing, and yet a third's thematization. The discrepancy in the use of these terms derives, I believe, from the fact that those linguists have dealt with different languages with the pressure of language specific features. For English, Chomsky (1977) talks of topicalization and left-dislocation, and Ross (1967) of topicalization or focusing and clefting. Dik (1978), however, proposes to incorporate a standard use of such terms within a 'functional' theory of grammar. He draws a distinction between the two pragmatic functions 'theme' and 'topic'. Topic in Arabic is the given entity that the following 'predication' is about. Theme, on the other hand, 'specifies the universe of discourse with respect to which the subsequent predication is presented as relevant' (see discussion of pragmatic functions in Chapter II*). Notice also that in Brown & Miller (1980) there is a distinction between topic and theme; one can speak of the topic of a sentence, book or paragraph. Theme is the first constituent in the sentence. This is suitable for the European use of these terms. However, I shall be following the Arabic tradition to some extent. What is relevant here is the use of the term topic: I shall be

using it as a functional term and as a structural term as well:

functional in the sense that it specifies an already known entity and that is followed by some relevant predication; and structurally as a term denoting a particular node in a particular structure, namely the left-branching node of S' (utilising the X-bar notation). The right-branching node is S', hence the connection between the two meanings of topic is clear.

The discrepancy in the use of terms, then, is due to various definitions given by linguists and the various analyses proposed. Thus, for Chomsky and Ross, 'topicalisation', 'clefting', and 'left-dislocation' are terms that denote syntactic processes. 'Topic' and 'focus' are used to denote certain nodes in certain structures (Chomsky 1977). Topic, focus, and theme, on the other hand, are functional terms, referring to pragmatic functions that certain elements may stand in (Dik 1978, Brown & Miller 1980).

As for the treatment of dislocation or displacement that individual languages exhibit, this can be seen within the transformational model. This theory has witnessed a mightyswing from the early treatment by a special transformational rule to the more recent base-generated account of Chomsky (1977), in his treatment of 'topicalisation' and 'left-dislocation' in English. Structures like those below are used to exemplify these processes:

1. This book I really like
2. As for this book, I think you should read it.

In both sentences, the underlined NP's will be base-generated under the node 'Topic'. The difference between the two structures is seen in that the first involves a 'wh-movement' to a Comp position adjacent to the topic from a position following the verb 'like' (see following page), while in the other the topic and the rest of the sentence are related by a rule of 'predication' (see below). Chomsky goes on to argue that in

sentences like (2) there can be no transformational analysis in his terms (cf. Chomsky 1977), i.e. a wh-movement, since no transformation can 'create' the structure "as for this book" or even more complicated phrases that can appear in this position (like 4 below). He then postulates the base rule R1 in addition to Bresnan's R2 :

3. R1: S' → Topic S'

R2: S' → Comp S

He also assumes a semantic rule of predication to handle what he calls left-dislocation in English:

4. As far as John is concerned, I will never believe
the claims that have been made about him.

where him is understood to refer to John, violating the Complex Noun Phrase Constraint, by having 'John' outside the adnominal clause "the claims that have been made about him"; the wh-island constraint where 'John' is out of the clause containing an overt wh-complementiser 'or wh-phrase in Comp'; and Subjacency by moving a constituent across more than one bounding node in any single rule application (bounding nodes = S & NP), as in moving 'John' across the NP "the claims" and the S "I will ..." in (4) above. In other words, no rule of movement can apply to (4). To preserve the constraints, Chomsky assumes that pronouns are base-generated and permitted to refer freely. The rule involved here is not one of construal but one of predication. In relative clauses the rule of interpretation requires that the relative be taken as an open sentence satisfied by the entity referred to by the NP in which it appears. Left-dislocation is assumed to be handled by a similar rule; the proposition might be 'about' the item focused in the left-dislocated phrase.

As for topicalisation, Chomsky assumes the same analysis, except that in the topic S' structure, S' is a wh-clause. Thus, a sentence like (1) before, will derive from (1a):

1.a.

[S' [Topic this book] [S' [Comp] [S I really like what]]]

applying wh-movement, we derive (1b)

1.b.

[S' [Topic this book] [S' [Comp what] [S I really like —]]]

which undergoes wh-deletion to yield (1c):

1.c.

[S' [Topic this book] [S' [Comp] [S I really like —]]]

Chomsky's argument in connection with topic structures is used to motivate his basic analysis of wh-movement; thus topic structures are subject to constraints or conditions on movement rules like the Coordinate Structure Constraint - hence the following sentence

5.* This book, I really like that newspaper and

is ill-formed; or the wh-island Constraint - hence the ill-formedness of sentences like

6. ? This book, he asked me where I had read (Radford 1981)

Chomsky goes on to argue that in addition to Comparative and Topic structures, other types of structure involve an underlying wh-relative pronoun that undergoes wh-movement, and then wh-deletion (cf. On Wh-Movement.)

An interesting similarity is found between left-dislocation and topicalisation in English and Arabic with respect to the occurrence of an

anaphoric pronoun. Yet, the two structures show other differences in Arabic, enough to warrant a separate syntactic derivation for each. I have already discussed left-dislocation in the previous chapter; but I repeat below some sentences which I shall refer to as Set 1, followed by sentences of the topic-comment type, Set 2, in order to draw the distinctions between the two structures.

Set 1:

6. kataba muḥammad-un risaalat-an
 wrote Muhammad-nom letter-acc
 a. risaalat-an kataba muḥammad-un
 letter-acc wrote Muhammad-nom
 'Muhammad wrote a letter'
7. ḥadara muḥammad-un albaarihata
 came Muhammad-nom yesterday
 a. albaarihata ḥadara muḥammad-un
 yesterday came Muhammad-nom
 'Muhammad came yesterday'
8. ḡahaba al-walad-u ?ilaa s-suuq-i
 went def-boy-nom to def-market-gen
 a. ?ilaa s-suuq-i ḡahaba al-walad-u
 to def-market-gen went def-boy-nom
 'The boy went to the market'
9. raʔaa xaalid-un 'aliyy-an mubtasim-an
 saw Khalid-nom Ali-acc smiling-acc
 a. mubtasim-an raʔaa xaalid-un 'aliyy-an
 smiling-acc saw Khalid-nom Ali-acc
 'Khalid saw Ali smiling'

Set 2:

10. ar-risaalat-u kataba-haa muhammad-un
 def-letter-nom wrote-it Muhammad-nom
 'The letter, Muhammad wrote it'
11. as-^{✓✓}saari'-u qaabal-tu 'aliyy-an fii-hi
 def-street-nom met-I Ali-acc in-it
 'The street, I met Ali in it'
12. ʔamal-un ʔaxaʕ-tu kitaab-a-haa ʔamsi
 Amal-nom took-I book-acc-her yesterday
 'Amal, I took her book yesterday'
13. al-ijtimaa'-u ʔarad-tu-ka ʔan tahdura-hu
 def-meeting-nom wanted-I-you that you attend-it
 'The meeting, I wanted you to attend it'
14. al-ʔawlaad-u raja'-uu ʔilaa al-manzil-i
 def-boys-nom returned (p.m.) to def-house-gen
 'The boys, they returned to the house'

In the two sets we find constituents positioned to the left of the verb. This similarity may induce a unitary treatment, whereby a movement rule could be postulated. But the two structures are different: first, sentences of the first set are transformationally related to their counterparts, as we showed in the previous chapter, by left-dislocation or fronting of focused elements through a transformational rule that moves constituents to a position immediately to the left of the verb. Sentences of the second set are analysed as complex structures consisting of two constituents: a topic-NP and a sentential comment. In other words, initial NP's are generated at that position in deep structure/. Second left-dislocated constituents in the first set are of different categories; in the second set they are all NP's. These NP's are characterised by always

being in the nominative case, though their pronominal anaphors are in different cases. This is to say that these NP's would be inflected with different case endings if they had occurred in their normal position after the verb. The difference in case marking poses difficulties for an analysis with a single movement rule. (Whether or not case marking is handled by transformations or in the lexicon). The question would arise of how to account for the fact that some constituents retain their cases while others are assigned a new one. In other words, if 'displaced' elements were treated by one rule of 'extraction', the extracted elements would be expected to retain their syntactic and semantic relations to the sentences from which they were extracted, and this will be reflected on the surface in the retention of the original cases they are inflected with. This is exactly the case with sentences of the first set (6a-9a). -- On the other hand, the NP's of the second set exhibit the same case, which argues against the proposal that they have been 'extracted' or 'fronted'. Moreover, a unitary treatment of both structures will still raise a further problem regarding the discrepancy in the case markings: Why is it that only NP's can appear either in the nominative or accusative case, while Participial Complements retain their case markings? In other words, there is no explanation to the fact that while NP's are capable of changing their cases, Participial Complements cannot: (cf. (9)).

15. * mubtasim-un ra?aa muḥammad-un 'aliyy-an
 smiling-nom saw Muhammad-nom Ali-acc

A third distinction between the two structures can be found in the presence of a returning pronoun, called damiir 'aa?id in Arabic, in the comment part of sentences of the second set, and its absence in sentences of the first set. This is limited, of course, to those constituents, i.e. NP's, that have 'pro-forms'. Thus, sentence (10) contains the returning

pronoun -haa 'her'; (11) -hi 'him' ; (12) -haa 'her' ; (13) -hu 'him'. In sentence (14), there is no returning pronoun; this is a case of subject left-dislocation (discussed in the previous chapter) where the subject-pronoun is deleted. This point will be elaborated further in due course.

A fourth distinction between the two structures is this: topic-NP's i.e. NP's in the nominative case and with a returning pronoun, cannot be indefinite, whereas NP's that retain their case markings and exhibit no returning pronouns may have different 'degrees' of or even no definiteness:

16. jariidat-an qara?a muhammad-un
 newspaper-acc read Muhammad-nom

where jariidatan is indefinite and in the accusative case, and such sentences are complete. But the related sentence

17. jariidat-un qara?a-haa muhammad-un
 newspaper-nom read Muhammad-nom

with the left-dislocated NP in the nominative, the returning pronoun -haa is 'ungrammatical'; notice that the sentence is not so much incorrect as incomplete. The only proper interpretation for this is that of a noun followed by an adjectival relative clause, i.e. "a newspaper that Muhammad read". Only the following is a complete sentence:

18. al-jariidat-u qara?a-haa muhammad-un
 def-newspaper-nom read-it Muhammad-nom
 'The newspaper, Muhammad read it'.

The necessity for the definiteness of topic-NP's follows from the pragmatic consideration that topic NP's have in the message; they are

the 'given' entities about which something is said; given in the sense that they are 'already mentioned' and definite in the sense that they are 'known to the speaker and hearer' (see also discussion in Chapter II').

In addition to the above mentioned structural differences between left-dislocated structures and topicalisation structures, there are also differences in position, i.e. positional differences between the two.

Topics or NP's that are in the nominative case and have a returning pronoun precede left-dislocated elements in their order to the left of the verb. Consider the following sentences:

19. muḥammad-un fii l-bayt-i raʔay-tu-hu

Muhammad-nom in def-house-gen saw-I-him

'I saw Muhammad in the house'

20. muḥammad-un mubtasim-an qaabalat hind-un ʔaxaa-hu

Muhammad-nom smiling-acc met Hind-nom brother-his

'Hind met Muhammad's brother smiling'

21. 'aliyy-un mujtahid-an ʔannat-hu hind-un

Ali-nom clever-acc thought-him Hind-nom

'Hind thought Ali clever'

On the other hand, the following sentences are doubtful; in fact this is another area of controversy between the two traditional schools of grammar:

20a. ? mubtasim-an muḥammad-un qaabalat hind-un ʔaxaa-hu

smiling-acc Muhammad-nom met Hind-nom brother-his

21a. ? mujtahid-an 'aliyy-un ʔannat-hu hind-un

clever-acc Ali-nom thought-him Hind-nom

Sentences like (20a) and (21a) are analysed by Arab grammarians as being of the topic-comment type. The topic is an NP about which something

is being said. The NP's muhammadun and 'aliyyun are the topics, with the rest of the sentences being the comment. Yet, a striking phenomenon in these sentences is that part of the sentential comment has been moved to a position to the left of the topic. Whether this is allowed is an area of dispute between the two schools. However, notice that this is not allowed in Modern Written Arabic.

The Kufis dismiss such sentences as ungrammatical; within their theory of Regent and Operative, no operative of the comment can precede the topic. The Basri's differ among themselves as to the admissibility of fronting part of the comment to the left of the topic. For instance, one grammarian would allow all cases of preposing or fronting; another would disagree with the first on which cases of preposing should be allowed. Without ploughing any deeper into this thicket of controversy (as they say in Arabic), it seems that the main issue centres around the fronting of the whole comment. But as far as the fronting of the 'operative' of the comment is concerned, there seems to be a general agreement among the Basris. Their examples of preposing or fronting invariably involve prepositional phrases or adverbial phrases from the comment to the left of the topic. In other words, there seems to be a prominent 'inconsistency' in the arguments of the Basris, namely with regard to the movement of wh-words to a sentence-initial position (see previous chapter). Arab grammarians agree on giving the wh-phrases the same 'parsing' as their supposed answers will have in the sentences that are given as responses to these questions. Consider the following:

22. man ra?aa muhammad-un-fii l-bayt-i
 who saw Muhammad-nom in def-house-gen
 'Who did Muhammad see in the house?'

23. mataa taxarraja zuheir-un min al-jaami'at-i-
when graduated Zuheir-nom from def-university-gen
'When did Zuheir graduate from university —?'

The question word man is an indefinite interrogative pronoun 'who, whoever' referring to a 'rational' being, in comparison with maa 'what, whatever' referring to an irrational thing. This word is parsed as the object of the verb 'ra?aa', since the answer to that question will require an NP that will be in the direct object grammatical relation. mataa in (23) is parsed as an adverb for the same reason. This makes the two syntactically governed, i.e. operatives of the regents, i.e. the verbs of the two sentences. Accordingly, the Basris say, they should be able to show up to the left of the topic in sentences of the topic-comment structure. It follows that the sentences below should also be grammatical:

24. man muḥammad-un' raʔat hind-un fii bayt-i-hi
who Muhammad-nom saw Hind-nom in house-gen-his
'Who did Hind see at Muhammad's house?'
25. mataa zuheir-un taxarraja ʔaxuu-hu min al-jaami'at-i
when Zuheir-nom graduated brother-his from def-university-
gen
'When did Zuheir's brother graduate from university?'

However, these sentences are dismissed by the majority of Arab grammarians as ungrammatical, though they are similar but not absolutely identical to (20) and (21).

Topics then have to precede left-dislocated elements, and should be treated in a different fashion from left-dislocation altogether.

So far, we have considered structural as well as positional considerations

for distinguishing between structures of the two sets, 1 + 2 (pp. 1 + 2).

Are there any other considerations that could give further support for a separate treatment of topic-comment structures?— like functional considerations, for example?

We may recall while discussing pragmatic functions in Chapter T₁ that there need be no smooth one-to-one correspondence between structural units or categories and functional units. This independence of each from the other, put forward by Dik (1978) (but originally Halliday's — ironically not mentioned by Dik), can be seen in that a 'focused' element need not be moved or left-dislocated. In other words, it can be focused while in its original position, for its pragmatic function will not change. Left-dislocation highlights a certain element, brings it more into focus, (cf. Chapter II₂ for definition) thus makes it the most prominent or salient element in the sentence.

Returning to the issue under discussion, if functional distinctions can be found between the two structures, those of left-dislocation and those of topic-comment, this will give further support for distinguishing between them.

We maintained earlier that topic NP's that are in the nominative case and have a returning pronoun in the comment represent the given or definite entity about which a following statement is to be made. Proceeding to give a statement about this topic makes it, i.e. the topic, assume a central place in the way we envisage the message; it is what we want to talk about, followed by what we want to say about it. Like Halliday's theme, it is a constituent followed by a sequence of constituents that normally make a complete sentence. To illustrate, consider the following sentence:

26. al-hurriyyat-u tukaafiḥu min ʔajli-haa aš-šu'uub-u
def-freedom-nom struggle for sake-its def-peoples-nom
'Freedom, peoples struggle for it.

In the above sentence, we are not talking about the peoples; rather, we are talking about 'Freedom', followed by what we want to attribute to it, namely "peoples struggle for it". In other words, using Halliday's definition, al-hurriyyatu, structurally, is the theme, the starting point of the message, and informationally, it is the topic of the message, and indeed could be the topic of subsequent sentences.

On the other hand, left-dislocated elements that retain their cases and leave no pronouns constitute salient elements in the sentence and serve a different pragmatic function. They provide the new information or serve a contrastive function (see Chapter II'), while topics constitute the given or old information, which accounts for the definiteness of the topics.

Furthermore, topic-NP's are normally 'spatially' separate from .. -- the following comment: this is to say that questions are asked about the comment: for example, in the following sentences

27. ar-risaalat-u ?ayna wajada-haa 'aliyy-un
 def-letter-nom where found-it Ali-nom
 'The letter, where did Ali find it?'
28. xaalid-un man sarada sayyaarat-a-hu
 Khalid-nom who stole car-acc-his
 'Khalid, who stole his car?'

the topics ar-risaalatu and xaalidun fall outside the realm of the questions that follow them. However, the topics may fall within the realm of questions and the following sentence could be a statement; consider the following example, with 'aliyyun' said with a rising tone:

29. 'aliyy-un, lam ?ara-hu ?amsi
 Ali-nom not (I) see-him yesterday
 'Ali, I did not see him yesterday'

Such a sentence is used as a response to a question about Ali. We can imagine a discursal situation where I, the hearer, respond to the speaker's inquiry about Ali, thus repeating or echoing one word of the speaker's question or statement, in this case Ali.

To recapitulate, we can say that sentences showing left-dislocated constituents are transformationally related to their counterparts in which these left-dislocated elements appear after the verb. In other words, a transformational rule of left-dislocation or fronting will account for the appearance of one or more constituents to the left of the verb, and this was thoroughly discussed in Chapter III. In sentences beginning with topics, on the other hand, the topic NP's are generated in the base, under a base-generated node 'Topic', followed by a sequence of elements that comprise the comment, as will be argued later on.

Before going into topicalisation in more detail, let us summarise what has been said so far, with some recaps from Chapter II.

1. Sentences beginning with NP's should be analysed in a manner different from sentences with initial NP's as a result of a movement process. In other words, some of these sentences beginning with NP's are the result of a movement process on verb-initial structures; others have their initial NP's generated in the base, and consequently have not undergone any change in their linear topic-comment structure.

2. The distinction between topic-comment structures and left-dislocation is based on the following criteria:

A. Structural Criteria

Structures resulting from the application of left-dislocation of constituents do not show any returning pronouns to the right of the verb that are coreferential with the NP to the left of the verb. Topic-Comment structures, on the other hand, exhibit returning pronouns in the

comment part of the sentence that are coreferential with the topic.

Moreover, NP's preposed from a post-verbal position to sentence-initial position retain their case markings, while topic-NP's are in the nominative case irrespective of the cases they might have had if these NP's had appeared after the verb. In other words, these NP's do not have to agree with the case of their returning pronouns.

B. Positional Criteria

Left-dislocated NP's occur in a position different from that which topic-NP's assume to the left of the verb. This is to say that left-dislocated NP's typically occur to the left of the verb and the right of the topic-NP's in sentences that contain both of them. This shows clearly that linearity in order between preposed NP's and topic NP's is strict, and the reverse does not hold. This is made more obvious in the order that wh-phrases assume in relation to topics. Sentence-initial wh-words appear to the right, not to the left, of the topic NP's in sentences that contain both elements.

C. Functional Criteria

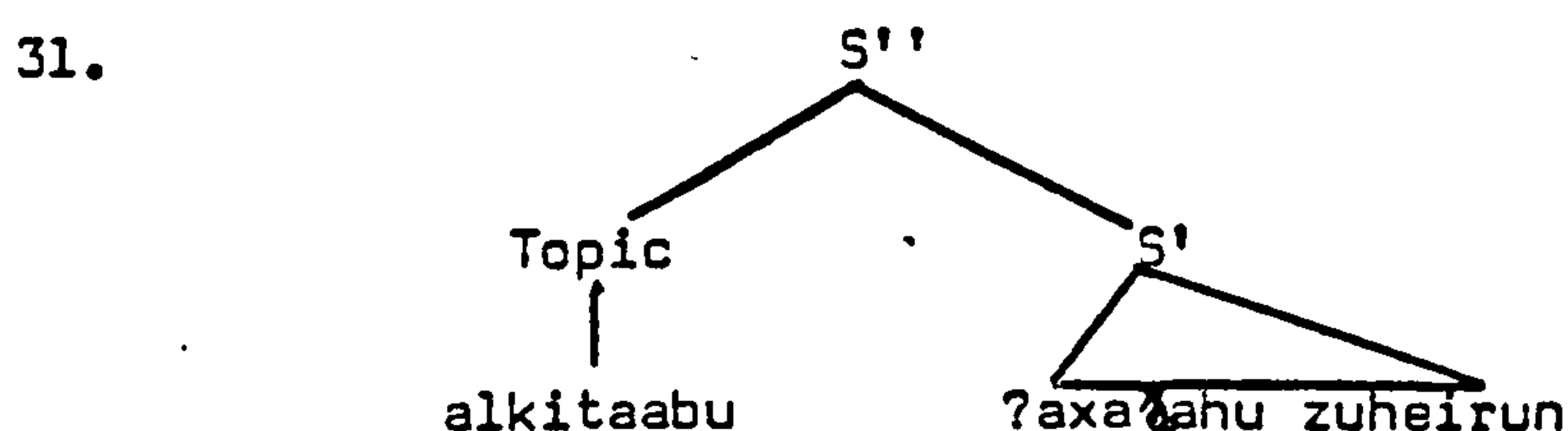
Topics, being different from left-dislocated or fronted NP's, constitute the information regarded as given by the speaker, and about which the speaker proceeds to say something. By contrast, preposed NP's that are moved from their places after the verb to a pre-verbal position are the salient 'focused' elements that usually provide the 'new' information or serve a contrastive function. Thus the two types of NP's serve different functions, and accordingly topic NP's have to be definite. Sentences beginning with indefinite topics ^{are} grammatically correct as far as they go but are incomplete and thus unacceptable.

4.2. TOPICALISATION

Topic-Comment structures are complex in comparison with sentences that exhibit left-dislocated or fronted NP's. Thus,

30. al-kitaab-u ?axaxa-hu zuheir-un
 def-book-nom took-it Zuheir-nom
 'The book, Zuheir took it'

is a complex sentence that consists of two parts; a topic-NP and a sentential comment. This can be represented schematically as in (31):



It is interesting that this analysis is identical with that of the grammarians of the Kufi school. Ibn Hisham, for example, analyses such a sentence as being composed of a mubtada 'beginning' and a xabar 'news'. He calls this sentence a jumlatun kubraa 'a complex sentence', since there is another sentence embedded in it, which he calls a jumlatun suġraa, a simple sentence, which constitutes the xabar or comment.

Such sentences with left-dislocated NP's in English are accounted for by Chomsky with an analysis whereby left-dislocated NP's are base-generated, i.e. generated by the PS rules of the grammar. Ross (1967), on the other hand, derives such sentences transformationally through a copying rule. For example, by applying the copying rule of left-dislocation to John in

32. I didn't see John

we get

- 32.a. John, I didn't see him

where John has been left-dislocated and has left behind a copy pronoun him in the position out of which he has moved. This is in contrast with a chopping rule of transformation, of topicalisation, which will prepose John to give

32.b. John, I didn't see —

where the position out of which John has moved (marked by —) is left empty.

Thus the original PS-rule (Bresnan's):

33. $S' \longrightarrow \text{Comp } S$

is modified into

34. $S \longrightarrow \text{Comp } \left\{ \begin{matrix} S' \\ S \end{matrix} \right\}$

An additional PS-rule will supplement these rewriting rules in order to handle the rewriting of S'' . Chomsky writes this rule as follows:

35. $S'' \longrightarrow \text{Topic } S'$

It is worthwhile at this stage to explain the terminology used in the formulation of the rules. Chomsky develops a partial employment of the X' theory. The use of traditional notation for syntactic categories such as Sentence and Complementiser is supplemented with the X -bar notations like one bar, two bars or no bar. By using this kind of notation Chomsky tries to distinguish between the different levels of the category S ; S' being the initial constituent comprising the Comp and the S ; S being a category derived only from S' ; and S'' which is a different 'kind' of sentence generated from S' . However, let us consider the hazards of these notations.

S does not fall within the domain of the syntactic categories that the X-bar convention promotes; it has been replaced by V''' . This was motivated by one of the major conventions of the X-bar theory, namely that each lexical category X defines a set of syntactic categories $[X', X'', \dots, X^P]$, the super-categories, related by the PS rules of the form $[X^n \rightarrow \dots X^{n-1} \dots]$ (cf. Jackendoff 1977). Also, Jackendoff replaces S by V'' in order to achieve a single general configuration that fits both 'subject of a sentence' and 'subject of an NP'. Accordingly, VP, S, S' are supercategories of the lexical category V, i.e. $[V', \dots, V^i, \dots, V^j, \dots]$. The PS rules concerning sentences should, within this theory, be written in terms of V's and not S's.

Another relevant point which merits discussion concerns the maximal value of "n" in a category " X^n ".

Jackendoff (1977) stipulates that, except for two cases, PS rules taking X^n as the left-hand symbol, will have to have one and only one X^{n-1} to the right. No category X^n , except in rules of nominalisation and conjunctions, can appear in place of X^{n-1} ; that is, the head of a category cannot be of the same higher level than that of this category. Jackendoff also chooses for a uniform maximal value for n in X^n , and states that "the most uniform hypothesis is that n equals 3 for all categories" (Jackendoff 1977). This means that we have two hypotheses about the X-bar convention against which we can judge the present formulation of the PS rules given by Chomsky and stated previously. The first hypothesis is that the maximal value for n (=the number of bars) is 3, and the other is that, except for PS rules of nominalisation and conjunction structures and the PS rules writing them, are of the following shape:

$$36. \quad X^n \rightarrow (C^i) - X^{n-1} - (C^i) \dots (C^i) \dots \quad \text{where } i = 3$$

where, basically, the first constituent C^1 is a specifier of the head, X^{n-1} is the head, and the following constituents C^i are the complements of the head. (cf. Jackendoff, 1977).

Two things can be observed here: (1) S'' violates Jackendoff's hypothesis about the maximal value of n , since it is 4 here. And if X''' is a major syntactic category, then what would S'' be? Clearly, adopting Jackendoff's hypothesis, only S' is a major syntactic category, S'' is not. (2) The second point is the fact that S'' is generated by a PS-rule that rewrites S' . In other words, the head of a category in this case is of a higher level than the category itself. This is a violation of Jackendoff's second assumption, namely that the head of category X^n should be X^{n-1} . The only admissible PS-rule to Jackendoff is that which rewrites S' (V''') as Comp- S ; S being V''' . The first rule that rewrites S' as Comp S'' is not, since S'' is V'''' here.

One way out would be to allow the head of a category X^n to be X^{n+1} , for the lexical element, i.e. verb projection. Secondly, it seems necessary to abandon the idea that the uniform maximal value for n , is 3 for all categories. (cf. Radford 1981, Ch. III)

Another point is worth mentioning here, namely the introduction of the term "topic" as part of the inventory of terms by which we write our rules of grammar. Chomsky does not provide any explanation for the use of this term nor does he talk about the idiosyncrasy of it. It seems that it was introduced like other terms in the rules and with the same status that other syntactic categories like NP, VP, ... have. This conclusion that topic is a syntactic category is inevitable since the introduction of this term in rules written within a theory in which rules can only be written in terms of syntactic categories, leaves no room for speculating over what status this term has been allocated.

It is also interesting to note that Chomsky has included such a heavily loaded term, i.e. functionally, in his PS rules, without extending such rules to include other elements; this is to say that by introducing Topic, Chomsky was expected to name the other part as Comment. In fact, Chomsky calls the first term Topic but the second S', a syntactic category. This is probably because the topic of S' does not have the same uniform categorial status of sentence as the comment of S' always has.

Can we spot any parity between the Topic and the Comp of S' and S? After all, they are material before the head.

Chomsky calls the material preceding the head of a category the specifier of that head. Can't we also call Comp a specifier of both S' and S? If we assume that, then calling the material before the category -- S' a specifier of that category would help in spotting a parity among them and would also maintain some uniformity in terminology. Together with the set of complementizers generated under Comp of S, and the other set of complementizers generated under Comp of S', these elements that precede S' would constitute the set of specifiers of the verbal heads (Bakir, 1979). Also, these specifiers will be marked for the name of the categories they are specifiers of. Thus,

"spec^{V'}", the complementizer of S(V') will be characterised with the feature [+WH] allowing wh-elements to move to that position;

the spec^{V'''}, will be marked with the feature [+nominative] or analysed as NP for Arabic, and NP, PP, ... in a grammar of English."

(Bakir 1979)

In other words, rule (35) may be modified along Bakir's line of argument to read as follows:

37. $V''' \longrightarrow \text{Spec}^{V'''} V'''$

4.3. Relationship Between Topic and Comment

As mentioned earlier, topic-NP's differ from 'other' left-dislocated NP's by having returning pronouns coreferential with the topic-NP's in the Topic-Comment sentence; left-dislocated NP's do not. In fact, the presence of a returning pronoun, damiir 'aa?id, in the comment sentence that is coreferential with the topic NP is a condition on the well-formedness of topic-comment sentences:

- 38.a. muhammad-un ?a'taa-hu 'aliyy-un kitaab-an
 Muhammad-nom gave-him Ali-nom book-acc

'As for Muhammad, Ali gave him a book'

- b.* muhammad-un ?a'taa-Ø 'aliyy-un kitaab-an

- 39.a. hind-un ?axaʔat ?amal-un kitaab-a-haa
 Hind-nom took Amal-nom book-acc-her

'As for Hind, Amal took her book'

- b.* hind-un ?axaʔat ?amal-un kitaaba-Ø

- 40.a. al-ʔamiir-u 'alima n-naas-u bi-huɖuur-i-hi

def-prince-nom learnt def-people-nom of-presence-gen-his

'As for the Prince, the people learnt of his presence'

- b.* al-ʔamiir-u 'alima n-naas-u bi-huɖuuri-haa

The grammaticality of the (a) sentences and the ungrammaticality of the (b) ones is due to the presence of a returning pronoun in the comment part that is coreferential with the topic-NP's muhammadun, hindun, and al-ʔamiiru, respectively. In the (b) sentences of (38) and (39), there is no returning pronoun, and in (40) the pronoun is in the third person feminine form while the topic-NP is a masculine noun. Thus, the pronouns in the (a) sentences of (38) and (39) are interpreted as coreferential with the topic-NP's mentioned above.

We have seen that within a transformational analysis of topicalisation this fact follows automatically from the transformational process used in the derivation of such structures, i.e. a copying rule will derive left-dislocated structures (topic-comment here): an NP is copied to the left of the sentence and the second occurrence of the NP is pronominalised.

However, as we maintained earlier, topic-NP's are base-generated; this is to say that they are generated in the position they appear at on the surface. This raises the question of how to ensure the coreferentiality of the returning pronoun with the topic-NP. It is assumed here, in line with Chomsky's suggestion, that nouns and pronouns are base-generated, and are allowed to refer freely. Different proposals were advanced to account for the co- or non-referentiality between nouns and pronouns. One can instantly think of disjoint reference, proposed by Lasnik (1976). He formulates the rule as follows:

"if NP_1 precedes and c-commands NP_2 , NP_2 is not a pronoun,
then NP_1 and NP_2 are disjoint in reference",

for example, in the sentence

"He is not worried that Bill is unpopular" he and Bill are
not co-referential.

In other words, two NP's, Lasnik says, must have disjoint reference. He stipulates cases of disjoint reference when we do not need any other principle to govern such relations. In all cases, NP's must be allowed to have both co- or disjoint reference.

But this principle, though suitable in simple sentences, cannot account for the relationship between the topic-NP and the returning pronoun in a topic-comment structure. Rather, the relationship should

be of an anaphoric nature; this is to say that the pronoun cannot have a non-anaphoric interpretation. It must be coreferential with the topic-NP. Thus, it is necessary to supplement Lasnik's proposal with a rule that establishes the anaphoric link required between the topic-NP and the returning pronoun in the comment. A rule of interpretation appropriate to these sentences would treat the pronoun as a bound variable.

Chomsky (1977) proposed such a rule for relative clauses containing returning pronouns and for 'left-dislocation' structures. It "is not a rule of construal but rather a rule of different category that we may call 'rule of predication'". Chomsky also says that such a rule does not obey certain constraints, like the Tensed-Island Constraint and the Specified Subject Constraint, that he imposes on rules of construal.

Let us apply Chomsky's notions to our data. In the (a) sentences, the comment parts containing the returning pronouns obey the two conditions above: they contain specified subjects, and are all tensed. Still, these returning pronouns are allowed to have an anaphoric relation with the topic-NP's and they stand in the comment as free variables. In other words, the rule that establishes the anaphoric relation between the returning pronoun and the topic-NP violates Chomsky's conditions on rules of construal.

Rivero (1980), working on her Spanish data, provides the rule of coreferentiality as follows:

41. Rivero (21) (p.371)

$$S'' \left[\text{Top} \left[\text{NP}_i \right] S' \left[\dots \text{pronoun} \dots \right] \right] \rightarrow S'' \left[\text{Top} \left[\text{NP}_i \right] S' \left[\dots \text{pronoun}_i \dots \right] \right]$$

According to this rule, the "left-dislocated structure", i.e. the Topic-NP in our case, is interpreted with S' as an open sentence (the comment) satisfied by the NP in topic position: there must be at least one NP in the comment that is interpreted as anaphoric to the topic-NP. The pronoun will, now, be translated in the logical form by the same variable as the topic NP. Thus, the sentence will get a proper semantic interpretation, since the interpretive rule for topic-comment structures treats the comment as an open sentence satisfied by the topic-NP with the pronoun interpreted as anaphoric to the topic-NP. The rule of interpretation, provided by Rivero, is as follows:

42. Rivero (22)

$$S' [\text{Top} [\text{NP}_i] \ S' [\dots \text{pronoun}_i \dots]] \rightarrow S' [\text{Top} [(\text{NP})_x] \ S' [\dots x \dots]]$$

This interpretive rule would mark as ill-formed a sentence in which no variable is satisfied by the NP in topic position. Thus, (38b) is asterisked as unacceptable since there is no variable, i.e. pronoun in the S' comment part to satisfy the topic-NP muhammad; no variable in the comment of (39b) that could be interpreted as coreferential with, thus satisfying, the topic-NP hindun, and the sentence is asterisked; and the same applies in (40b): though there is a pronoun in the comment part, it is not interpreted as coreferential with the topic-NP al-ʔamiiru, since this pronoun is in the third person feminine while the topic is a masculine noun.

To recapitulate, we have argued in the previous pages that the relation between the two components of the topic-comment sentences is established by an anaphoric pronoun in the comment, that is coreferential with the topic-NP. The absence of this pronoun renders the sentence ungrammatical.

43. 'aliyy-un ?a'tay-tu $\left\{ \begin{smallmatrix} * \\ \emptyset \\ \text{hu} \end{smallmatrix} \right\}$ l-kitaab-a
 Ali-nom gave-I- $\left\{ \begin{smallmatrix} \emptyset \\ \text{him} \end{smallmatrix} \right\}$ def-book-acc
 'Ali, I gave him the book'

44. 'aliyy-un wajad-tu kitaaba- $\left\{ \begin{smallmatrix} * \\ \emptyset \\ \text{hu} \end{smallmatrix} \right\}$
 Ali-nom found-I book- $\left\{ \begin{smallmatrix} \emptyset \\ \text{his} \end{smallmatrix} \right\}$
 'Ali, I found his book'

45. xaalid-un ?i'tamadat hind-un 'alay- $\left\{ \begin{smallmatrix} * \\ \emptyset \\ \text{hi} \end{smallmatrix} \right\}$
 Khalid-nom relied Hind-nom on- $\left\{ \begin{smallmatrix} \emptyset \\ \text{him} \end{smallmatrix} \right\}$
 'Khalid, Hind relied on him'

It is the presence of the returning pronoun that makes the above sentences grammatical. Otherwise, as the versions of these sentences show, such sentences will be ungrammatical. Is this a generalisation?

In order to validate such a statement as the above, i.e. that if the comment contains no returning pronoun the sentence will be ungrammatical, let us consider another set of sentences.

46. 'aliyy-un mataa raja'a \emptyset min al-madiinat-i
 Ali-nom when returned from def-city-gen
 'Ali, when did he return from the city?'

47. al-'arab-u kayfa. yasta'iiduuna \emptyset majda-hum
 def-Arabs-nom how regain(p.m.) glory-their
 'The Arabs, how will they regain their glory?'

48. hind-un 'aliyy-an tazawwajat Ø
 Hind-nom Ali-acc married
 'As for Hind, she married Ali'

The comment part in the above sentences does not contain a returning pronoun coreferential with the underlined topic, yet the sentences are grammatical. In fact, the comment does not contain any pronoun. However, if we insert the pronoun, the acceptability of the resulting sentences, in a non-emphatic context, will be marginal, even doubtful:

- 46.a. 'aliyy-un mataa raja'a huwa min al-madiinat-i
 47.a. al-'arab-u kayfa yasta'iiduuna hum majda-hum
 48.a. hind-un 'aliyy-an tazawwajat hiya

In other words, only emphatic pronouns can occur in these sentences.

We may observe that the pronouns are in subject position; and following the standard transformational analysis, these sentences can be accounted for. Following a simpler approach, i.e. the lexicalist one, the sentences above can also be accounted for. In what follows, I discuss briefly the two analyses, opting for the simpler one.

In a transformational model, we may assume that the above structures are generated with these pronouns which are then deleted. Deletion rules are part of or one component in the grammar that follows transformations: this is to say that deletion rules apply on surface structures resulting from the application of transformations. Semantic interpretation rules take these structures as their input before the deletion rules have applied. We may recall that within the Extended Standard Theory (EST) ordering arises as a problem. The only order that the theory permits is that between components in the structure of the core grammar (Chomsky 1978), which is envisaged by Chomsky as follows:

49.

1. Base

2. Transformations (Movement, Adjunction,
Substitution)

3a. deletion rules

3b. construal rules

4a. filters

4b. interpretive rules

5a. phonology and
stylistic rules

5b. conditions on binding

(Chomsky: "On Binding",

Ling. Inq. 11, p.3)

Base rules generate a set of deep structures which are transformed into surface structures by the transformational component. In other words, base rules are followed by transformations that map base structures onto surface structures, which are in turn mapped into Universal phonetics, through the components (3a,4a,5a). On the other hand, the rules of the semantic component (3b, 4b,5b) will apply to the surface structures in order to give the logical form (Chomsky, "On Binding").

Returning to the issue under discussion, i.e. deleted pronouns, we mentioned that these deleted pronouns are subject pronouns. Under this transformational treatment, it appears that this deletion of coreferential pronouns is limited to subject pronouns in the comment part of the topic-comment sentence. If these pronouns are direct objects, objects of prepositions, or part of a genitive construction, as in (50), (43), (45), (44), respectively, deletion does not apply. If deletion applies, the resulting sentences will be marked as ungrammatical, as in the previously-mentioned examples, and as in the following ones as well, since deleted pronouns are not in subject position:

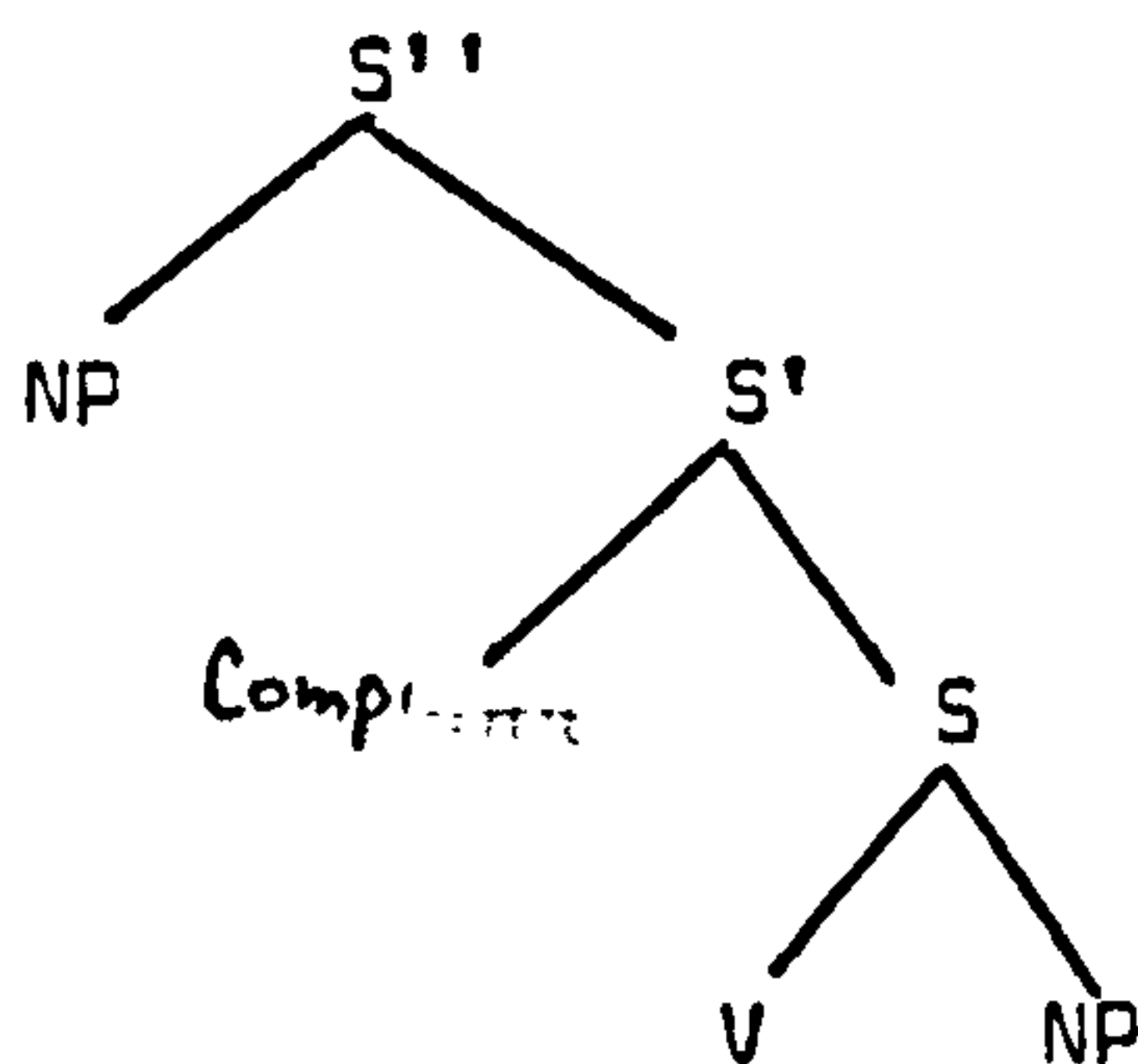
53a. 'araf-tu al-walad-a allaḡii kasara huwa z-zujaaḡ-a

54a. qaabal-tu l-bint-a allatii takallamat hiya fii
l-ijtimaa'-i

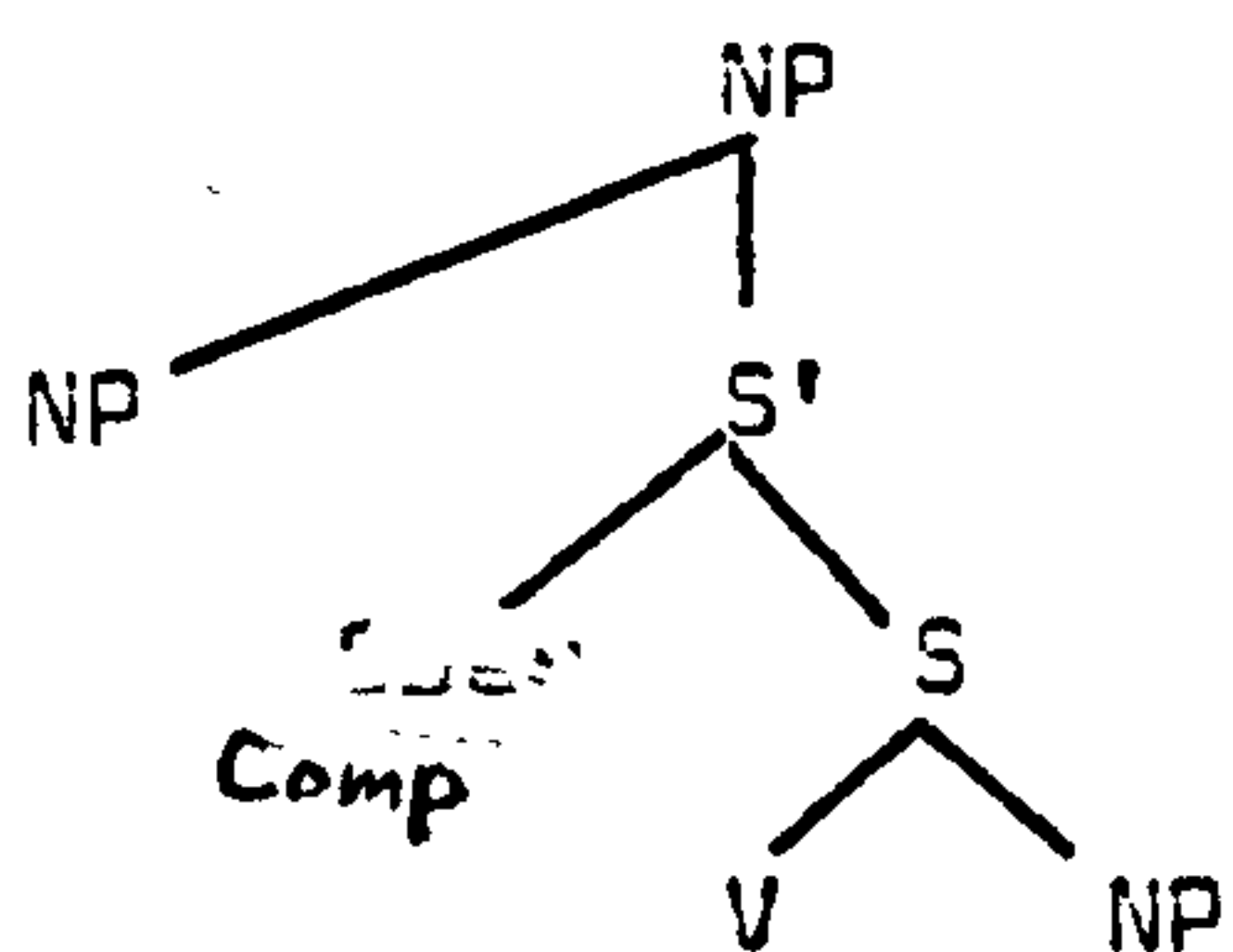
So much for the transformational account. A simpler analysis can be given for these sentences, adopting the all-morphology-in-the-lexicon approach. Under this analysis, there will be no need for a transformational rule to delete the subject pronoun, and a rule of construal or a surface filter would reject such sentences as (46a-48a) and (53a+54a).

Looking at the structure of the topic-comment and relative clauses shows a clear parallelism: in both cases, we have an S' related to an NP antecedent; a topic in the topic-comment sentence and an antecedent of a relative clause in the relative clause structure. In both the subject of S' is coreferential with the antecedent NP to which the S' is related. This relation can be represented configurationally as follows:

55.a. topic-comment structure



b. relative clause structure



A semantic rule will construe the first NP of the relative clause to be the subject of the verb which is already marked with that feature in the lexicon. Another rule will construe the topic-NP to be coreferential with the 'lower' NP in the above structure of the topic-comment. Let us consider another set of sentences to illustrate this point. However, before going any further, sentences (53a) and (54a) give rise to a problem which cannot be solved here, namely the structure of relative clauses. If all lexical material is inserted from the lexicon before any transformations apply, the deep structure of (53a), for example, will contain both allaḡii and huwa. But these forms cannot both occur in subject position. A possible deep structure is $\left[\begin{matrix} \text{NP} & (& \text{V} & \underline{\text{NP}} & \dots) \\ & \text{S} & & & \end{matrix} \right]$ where the underlined NP is replaced by allaḡii which is later preposed to a position before the verb; or $\left[\text{NP } \text{allaḡii} \quad (\text{S} \quad \text{V} \quad \underline{\text{NP}} \quad \dots) \right]$ and the underlined NP is replaced by the pronoun huwa which is later deleted. But this still leaves the problem of how to classify allaḡii.

56. muḥammad-un 'aliyy-un ḍaraba-hu
Muhammad-nom Ali-nom hit-him
57. ?amal-un hind-un qaabalat-haa
Amal-nom Hind-nom met-her
58. al-mu'allimuuna allaḡiina ḍarabuu l-?awalaada allaḡiina
def-teachers who hit def-boys who
ṣatamuu-hum
insulted-them

These sentences have the following representations:

56.a.

[S₁' [NP_i muḥammadun] [S'₁ [S₂' [NP_j 'aliyyun] [S'₂ daraba-hu]]]]

57.a.

$[S'_1 [NP_i \text{ ?amalun}] [S'_1 [S'_2 [NP_j \text{ hindun}] [S'_2 \text{ qabalat-haa}]]]]]$

58.a.

$[NP_i [NP_j \text{ almu'allimuuna}] [S' \text{ alla}^{\chi}iina [S \text{ darabuu} [NP_k [NP_n \text{ al-?awlaada}] [S' \text{ alla}^{\chi}iina [S \text{ šatamuu-hum}]]]]]]]$

A rule of construal applies to (56a-58a), determining that the NP in S'_2 is the subject and that the clitic -hu, etc. refers back to the topic NP. This is to say that the person who did the beating in (56a) is not muhammadun but 'aliyyun. In (57a) it was hindun and not ?amalun who did the meeting; Amal was met, and in (58a) al-?awlaadu insulted the teachers and not vice versa. The cliticised object pronouns in (56), (57), (58) will only refer to muhammadun, ?amalun, and al-mu'allimuuna, respectively.

It is clear then that by handling morphology in the lexicon, the verb which is the 'nucleus' of the sentence will have all the features attached to it and is inserted directly into the phrase marker, without any transformational rule of gender or number, for example. To clarify this point, let us consider these sentences:

59. hind-un 'aliyy-un tadribu-hu

Hind-nom Ali-nom hit-him

'As for Hind, she beats Ali'

60. al-mu'allim-u at-tullaab-u ra?aa-hum

def-teacher-nom def-students-nom saw-them

'As for the teacher, he saw the students'

61. al-bint-u allatii tazawwajat ar-rajul-a alla²ii qaabalat-hu

def-girl-nom who married def-man-acc who met-him

'The girl who married the man whom she met'

Each verb in the above sentences provides enough morphological information to handle coreferentiality. Thus tadribu in (59) indicates that hindun is the agent of beating, and the verb already has the feature [+feminine] in its lexical entry. If, however, 'aliyyun were to be the agent, the verb form yadribu would be inserted from the lexicon and the pronoun clitic referring to hind would be -haa. The same can be said of sentence (61); qaabalat is the verb form already marked with the gender feature, i.e. singular feminine. In (60), the verb form ra?aa in the singular picks up al-mu'allimu as the subject. The availability of morphological information on the verbs then provides the interpretation as to the NP coreferentiality. We may also recall that semantic information plays a significant role in 'disambiguation'; consider the following sentences:

62. al-walad-u al-kitaab-u ?axa^χa-hu -- -- -
 def-boy-nom def-book-nom took-it
 'The boy took the book'
63. hind-un saa'at-u-haa faqadat-haa
 Hind-nom watch-nom-her lost-it
 'Hind lost her watch'
64. ištaraa 'aliyy-un al-bayt-a alla^χii ra?aa-hu ?amsi
 bought Ali-nom def-house-acc that saw-it yesterday
 'Ali bought the house that he saw yesterday'

Notice that the two NP's before the verb in each sentence are identical in features like number and gender that are usually taken as disambiguating factors. Yet, these sentences have only one interpretation, in which the subjects of ?axa^χa, faqadat, and ištaraa refer to alwaladu, hindun, and 'aliyyun, respectively, but not to alkitaabu, saa'atu-, or albayta. The reason for this is that semantically, the latter NP's cannot be agents for the actions denoted by these verbs.

Selectional restrictions of these verbs necessitate that the subjects should be either human or animate.

Semantic as well as morphological information on the verb provides sufficient interpretive clues.

To sum up, I have presented two accounts for the relationship that obtains between a preceding NP, whether in the topic-comment structure or the relative clause: a transformational account that requires a subject pronoun deletion rule, and a simpler lexicalist account, where such a rule is not needed. I have also tried to describe the structure of the topic-comment construction in Arabic and its generation in the PS rules of the grammar. I also tried to distinguish such structures from other dislocation structures on structural, positional, and functional grounds. I do not claim, however, that I have covered all structures in Arabic, .. particularly equational sentences, or structures where wh-elements seem to have returning pronouns, as exemplified below, the discussion of which would undoubtedly culminate in another dissertation. I leave such structures for future research and researchers.

65. muhammad-un fii l-bayti-i

Muhammad-nom in def-house-gen

'Muhammad is at home'

66. al-qitt-u hayawaan-un ?aliif-un

def-cat-nom animal-nom tame-nom

'The cat is a tame animal'

67. man allaḥii kallamta-hu fii l-ijtima'a'-i

who who spoke(you)-him in def-meeting-gen

'Who was it that you spoke to in the meeting?'

CONCLUSION

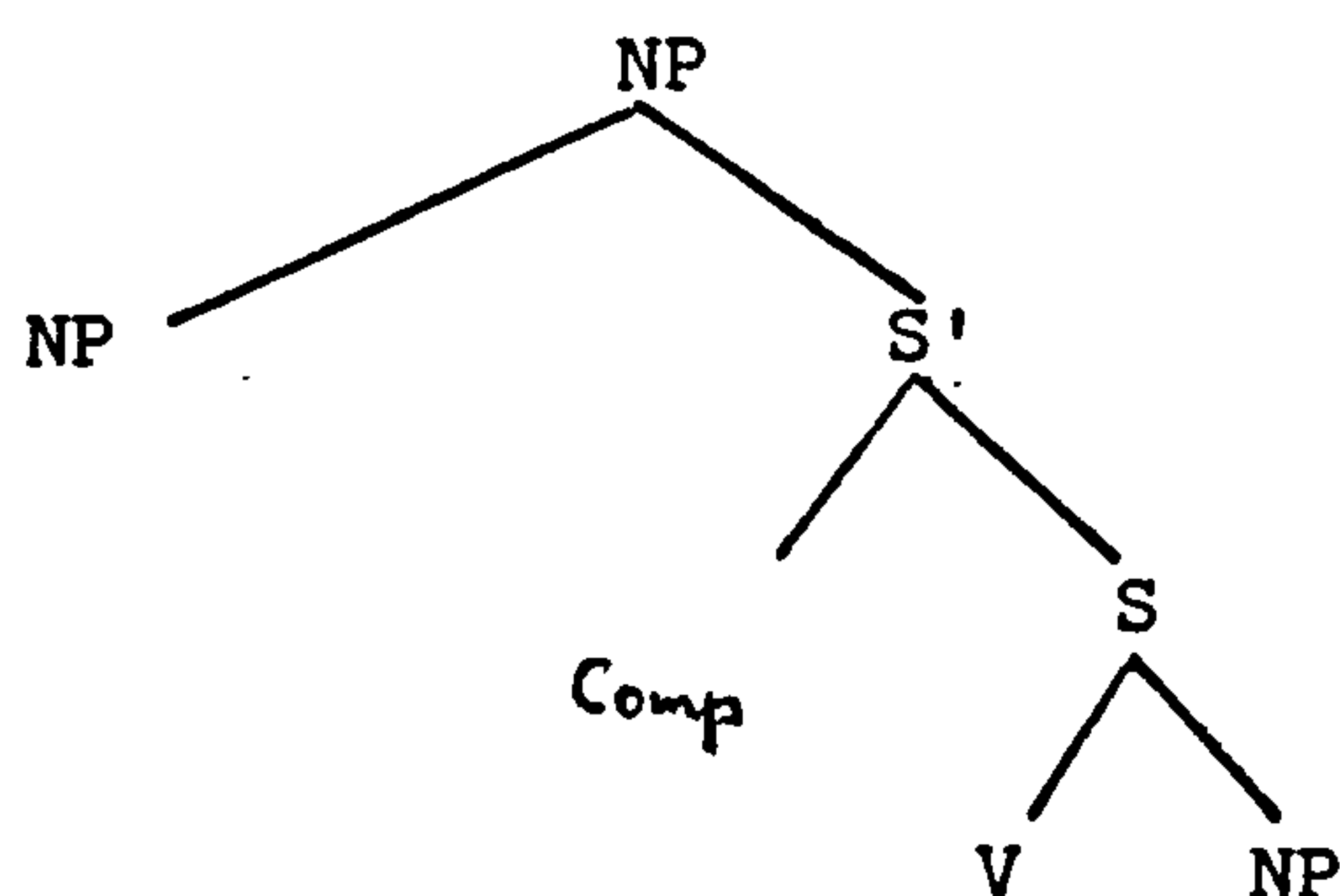
In this treatment of word order in Arabic we have used a generative model in which all morphology is handled in the lexicon, all transformations are optional (with surface filters to catch ungrammatical sequences), and semantic links are captured by rules of construal.

A basic word order of VSO was posited and defended on structural as well as pragmatic grounds (Ch.1). Thus, while VSO order is established as the basic order in Arabic, strict in some contexts where no morphological or semantic information is available, other surface orders like VOS, OVS are exhibited, but serve specific functions (Ch.11). Different proposals were considered in this connection (Dik, Givón, Halliday). Thus functions like theme/rheme, given/new, focus, and topic were discussed in relation to Arabic data. These functions were also discussed with regard to the various syntactic processes that signal them. Under the heading of dislocation or displacement two main syntactic processes were examined: left-dislocation by which constituents show up to the left of the verb, and verb-attraction whereby constituents move from their original place in a leftward direction to reach a position immediately to the right of the verb. These movement rules were formulated and constraints like the Co-ordinate Structure Constraint and the Modifier Movement Constraint were stated. In connection with left-dislocation, the movement of wh-elements was discussed, and it was shown that while constituents are preposed and sister-adjoined to the verb, wh-elements are preposed to the

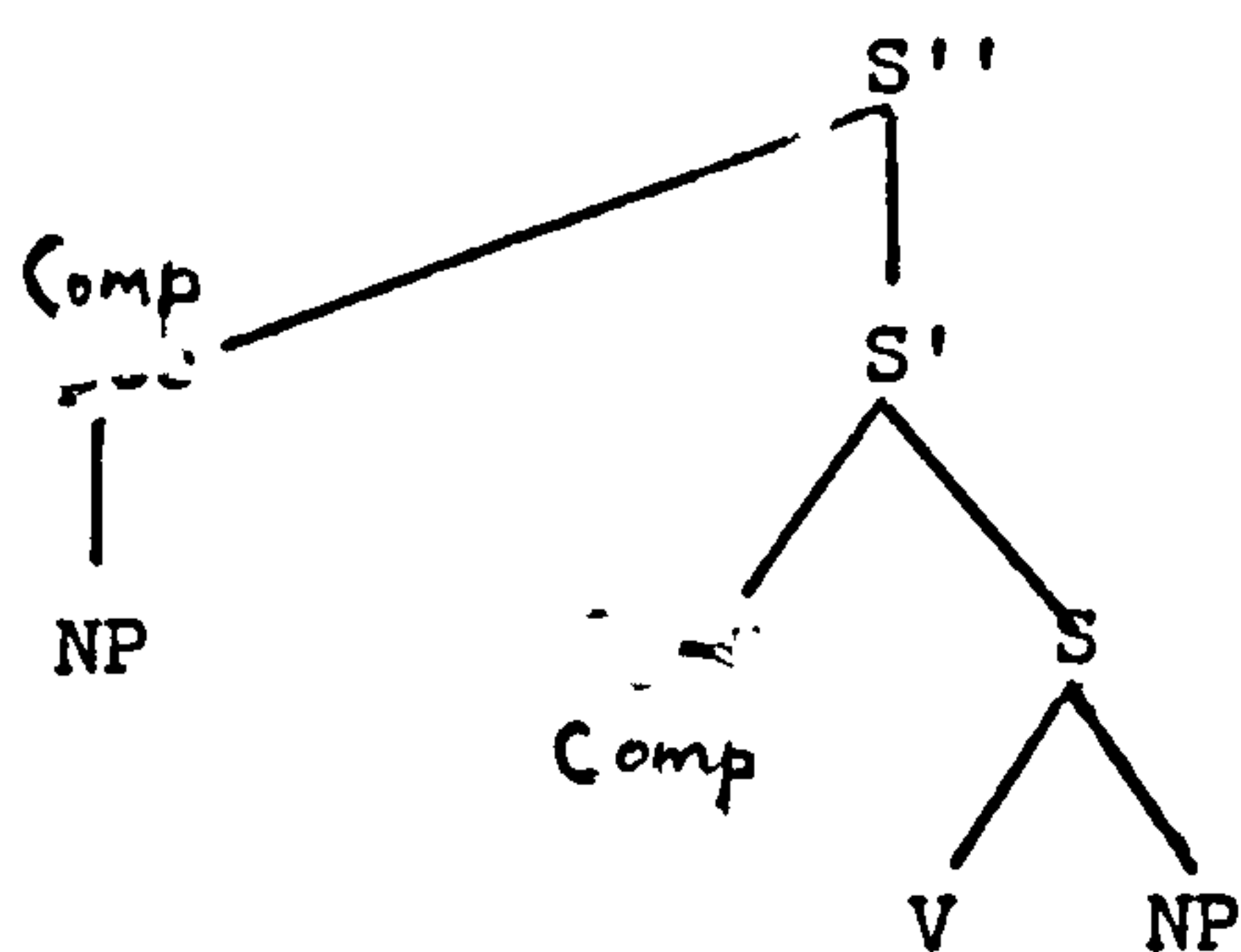
Comp position. The traditional grammarians' view of disallowing the subject to be preposed, lest it be confused with the topic-comment structure, was also examined, and it was shown that syntactically and pragmatically there was no reason to prevent the left-dislocation of the subject (Ch. 111).

Finally, I discussed the structure of the Topic-Comment in Arabic. It was shown that while constituents in simple structures can be left-dislocated, i.e. undergo movement, the topic of the topic-comment complex structure is base-generated in sentence-initial position. The relation between this topic NP, which is definite and in the nominative, and the comment is accounted .../

for by the presence in the comment part of a returning pronoun damiir 'aa?id that is coreferential with the topic. Coreferentiality was also discussed in relation to the relative clause in Arabic. Following the standard model analysis, it was shown that the subject pronoun which is later deleted is coreferential with its antecedent NP. Under the morphology-in-the-lexicon analysis, this rule of subject-pronoun deletion is dispensed with altogether; looking at the surface structure of (53) again, represented as follows



and the structure of the topic-comment



we can notice a parallelism in the structure of the two. A semantic rule will construe the first NP of the relative clause to be the subject of the verb which is already marked with that feature in the lexicon. Another rule will construe the topic-NP to be coreferential with the 'lower' NP in the above structure. This is a more economic approach; there will be no need for a deletion rule, and morphology is set apart from the syntax.

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PS-Rules

- (1) $\bar{S} \longrightarrow (\text{Topic}) \bar{S}$
 $\bar{S} \longrightarrow \text{Comp } S$
 $\text{Topic} \longrightarrow \bar{N}$
 $S \longrightarrow \bar{V} \bar{N} (\bar{A}) (\bar{N}) (\bar{P}) (\bar{Adv})$
 $\bar{N} \longrightarrow \bar{N} (\bar{A})$
 $\bar{N} \longrightarrow \text{Det } N$
 $\bar{P} \longrightarrow \bar{P} \bar{N}$
 $\bar{P} \longrightarrow P$
 $\bar{A} \longrightarrow \bar{A} \begin{matrix} \bar{N} \\ \bar{P} \end{matrix}$
 $\bar{A} \longrightarrow A \text{ Intensifier}$

The PS rules generate the structures analysed in this dissertation. Since the verb has not been investigated, \bar{V} would simply have to be rewritten as \bar{V} , which in turn would be rewritten as V. The \bar{A} in the above rule represents the participle in the accusative case (cf. p. 73).

Transformations

- (1) Verb-Attraction :

$$\begin{matrix} W & V & Z & X'' & U \\ 1 & 2 & 3 & 4 & 5 \end{matrix} \longrightarrow \begin{matrix} 1 & 2+4 & 3 & t & 5 \end{matrix}$$

- (2) Left-Dislocation :

$$\begin{matrix} V & W & X'' & Y \\ 1 & 2 & 3 & 4 \end{matrix} \longrightarrow \begin{matrix} 3+1 & 2 & t & 4 \end{matrix}$$

- (3) WH-Movement :

$$\begin{matrix} \text{Comp} & W & X'' & [\dots wh \dots] \\ 1 & 2 & 3 \end{matrix} \longrightarrow \begin{matrix} 3 & 2 & t \end{matrix}$$